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Generally, if such changes or variations are known to exist and affect the product significantly, a release note or Read Me file will accompany the User Guide, or will be available on the StorageCraft Technology Corporation web site. In that event, please read the release notes or Read Me file before using the product.

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Contact Information

StorageCraft Technology Corporation

11850 South Election Road, Suite 120

Draper, UT 84020

Web Site: www.storagecraft.com

General: contactus@storagecraft.com

Worldwide Contact: http://forum.storagecraft.com/Community/web2case/

Worldwide Sales:

United States

Phone: 801.545.4700

Fax: 801.545.4705

Asia Pacific

Website: www.storagecraft.com.au

Phone: 61.2.8061.4444

Fax: 61.2.9929.9771

Sales Email: sales@storagecraft.com.au

Support Email: support@storagecraft.com.au

Europe

Website: www.storagecraft.eu

Phone: +41 41 768 65 34

Sales Email: sales@storagecraft.eu

Information Email: info@storagecraft.eu

Or consult: http://www.storagecraft.com/contact_information.php

Worldwide Technical Support:

North America: http://forum.storagecraft.com/Community/web2case/

Asia Pacific: http://forum.storagecraft.com/Community/web2case/

Europe: http://forum.storagecraft.com/Community/web2case/

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INTRODUCTION

Overview

Welcome to ShadowProtect Granular Recovery for Exchange™ 6.1, the mailbox recovery software that saves time, money, and resources when recovering Microsoft® Exchange Server data.

ShadowProtect Granular Recovery for Exchange (SPGRE)works with your existing Exchange Server backup architecture and procedures, and allows you to recover individual mailboxes, folders, messages, attachments, calendar items, notes, and tasks directly to your production Exchange Server or any PST file. This eliminates time-consuming and expensive single mailbox (brick-level) backups. This powerful software also lets you search and create a copy of all archived email that matches a given keyword or criteria.

This user guide provides step-by-step instructions for completing specific tasks on the Microsoft® Windows®-based platform. See the Table of Contents or the Index to locate the pages on which particular topics are discussed.

Use Adobe® Acrobat® to open the PDF version of this user guide. After you open the PDF file, click the Hand tool to view the Table of Contents hyperlinks in layout view. Then click a hyperlink to jump to a specific topic in the manual.

Five Major Reasons for Using ShadowProtect Granular Recovery for Exchange

There are five primary ways you can benefit from using :

Minimize the time to restore an individual mailbox. can slash restore time, making it possible to restore mail items from a previous full backup directly into your production Exchange Server, or directly into a new or existing PST file. This eliminates the need for a recovery server and the extra steps required to separately import mail back into Exchange Server or Microsoft® Office Outlook®.

Eliminate backups of an individual mailbox. eliminates the need to back up individual mailboxes because they can be restored directly from an EDB file.

Minimize the time to locate all email matching specific criteria. includes an Advanced Find feature that can search across all mailboxes in an archive EDB file, rather than searching one mailbox at a time or bringing an old backup back online for analysis. And you can search by a variety of criteria, including keywords, subject, date and specific users.

Minimize storage space and the cost required to store and archive your backups. Because you don’t need to back up mailboxes individually doing a brick-level backup, you eliminate the backup space, cost, and time associated with performing brick-level backups.

Minimize the time to back up all mailboxes. SPGRE eliminates the need to back up mailboxes individually. Normally, companies do a full Exchange Server backup, and then run a second process to back up “Very Important Mailboxes” (VIMs) individually as well. SPGRE eliminates this second process.

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ShadowProtect Granular Recovery for Exchange 6.1 Enhancements

ShadowProtect Granular Recovery for Exchange 6.1 provides support for:

- Microsoft® Office 2010
- Microsoft® Exchange Server 2010 (including SP1)
- Microsoft® Exchange Server 2007 SP3

System Requirements

To use SPGRE on your computer, you need the following hardware and software:

- One of the following operating systems:
  - Windows XP Professional
  - Windows Server 2003 Standard
  - Windows Server 2003 Data Center
  - Windows Server 2003 Enterprise
  - Windows Server 2008 Standard
  - Windows Server 2008 Data Center
  - Windows Server 2008 Enterprise
  - Windows Server 2008 R2
  - Windows Vista® Business
  - Windows Vista Ultimate
  - Windows Vista Enterprise
  - Windows 7 Professional
  - Windows 7 Enterprise
  - Windows 7 Ultimate

  Note: *SPGRE in Windows Vista, Windows Server 2008, Windows Server 2008 R2, and Windows 7 can only be run by users with administrative privileges and in administrative mode.*

  Note: *32-bit and 64-bit versions of the above operating systems are supported.*

- The following virtual environments are supported:
  - VMware® Server 1.0x, 2.x
  - VMware® Workstation v6.0x, v7.0 x for Windows
  - Microsoft® Virtual Server 2005 R2
  - Microsoft® Hyper-V™
  - Microsoft® Hyper-V Server™ 2008
  - Microsoft® Hyper-V Server™ 2008 R2

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- Microsoft® Virtual PC 2007
- VMware® ESX/ESXi 3.5, 4.0, 4.1

Note: *Virtual operation of tape devices may have restrictions imposed by virtual operating systems.*

- Microsoft® Office Outlook 2000 or later. Machine must have Outlook 2000 or later installed and Outlook must have been run at least once to configure settings in Outlook. Additionally, those versions of Outlook that make a distinction between "Internet Email" and "Corporate Email" need to be configured for the latter.
  - **For Microsoft® Exchange Server 5.5:** Microsoft Outlook 2000 or Office Outlook® 2003 is required.

  Note: *Office Outlook® 2007 cannot connect to an Exchange Server 5.5. However, Outlook 2007 can be used with SPGRE to access an .edb file originating from an Exchange Server 5.5 environment.*

  - **For Microsoft® Exchange Server 2000 and Microsoft® Exchange Server 2003:** Microsoft Outlook 2000 or later is required.
  - **For Microsoft® Exchange Server 2007:** Microsoft Outlook 2003, Outlook 2007, or Outlook 2010 is required.
  - **For Microsoft® Exchange Server 2010:** Microsoft Outlook 2003, Outlook 2007, or Outlook 2010 is required.

Note: *The operating systems listed above and Office Outlook® are required to have the latest service packs installed.*

- Microsoft® .NET Framework 3.5 SP1. System must have .NET Framework 3.5 SP1 installed in order to function.
- Intel® Pentium® 4 class or higher compatible processor
- 1024 MB RAM minimum
- 200 MB of free hard disk space for the installation. More disk space will be needed for processing log files when opening an EDB file.
- Monitor with 800 x 600 or higher screen resolution

Note: *SPGRE supports Microsoft® Exchange Server 5.5, Exchange Server 2000, Exchange Server 2003, Exchange Server 2007 (through SP3), or Exchange 2010 (including SP1) installed. SPGRE may also run on the same server as Exchange Server 2007 (through SP3) or Exchange Server 2010 (including SP1) installed. SPGRE does not support other Exchange Server installation configurations.*

SPGRE is designed to run from a Windows®-based workstation and uses native Microsoft® Messaging APIs (MAPI) to communicate to the Exchange Server, ensuring reliable and consistent operation of your server. For MAPI to initialize properly, Office Outlook must be installed and configured on the workstation to connect to an Exchange Server. When connecting to an Exchange Server 2007 (through SP3) or Exchange Server 2010 (including SP1), Outlook 2003 or Outlook 2007 must be installed and configured.

Note: *Only 32-bit versions of Outlook 2010 are supported.*

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Mailbox Creation Wizard

To use Mailbox Creation Wizard on your computer, you must have the Exchange Server management tools for the version of Microsoft Exchange Server that you will be creating mailboxes on. Ensure the Exchange Server management tools and Microsoft Exchange Server version, service pack, and roll up level are matched.

For supported operating system and prerequisite requirements for the Exchange Management Tools, please refer to the Exchange Management Tools documentation for your specific version.

Configuring Microsoft® Office Outlook®

SPGRE requires that Microsoft® Messaging API (MAPI) be installed on your computer. To get full MAPI functionality, do the following before installing SPGRE:

1. Make sure that Office Outlook® is installed and has been run once.
2. Set up an email account on an Exchange Server.
3. For those versions of Outlook that distinguish between “Internet Email” and “Corporate Email,” use “Corporate Email” when configuring Outlook.
4. Run Outlook again, and connect to the Exchange Server.

Installing ShadowProtect Granular Recovery for Exchange

Follow these steps to install SPGRE:

1. Install and configure Outlook as described in “Configuring Microsoft Office Outlook.”
2. Turn off any disk utility or antivirus program running in the background.
3. Insert the ShadowProtect Granular Recovery for Exchange CD-ROM into your CD-ROM drive.
4. The installation program automatically starts. If it does not:
   - **For Windows Vista, Windows Server 2008, and later:** Click **Run** on the **Start/All Programs/Accessories** menu and type D:**setup.exe**, where D is the drive letter of your CD-ROM drive. Click **OK**.
   - **For Windows Server 2003 and earlier:** Click **Run** on the **Start** menu and type D:**setup.exe**, where D is the drive letter of your CD-ROM drive. Click **OK**.
5. Follow the on-screen instructions.

Uninstalling ShadowProtect Granular Recovery for Exchange

You can uninstall SPGRE by running the uninstall program.

1. Click **Start** and then click **Control Panel**.

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2. In Control Panel:

   For Windows Vista, Windows Server 2008, and later: Click **Uninstall a program** under the **Programs** heading.

   - Click **SPGRE 6.1**, and then click **Uninstall/Change**.

   For Windows Server 2003 and earlier: Click the **Add or Remove Programs** icon.

   - Click **SPGRE 6.1**, and then click **Change/Remove**.
   - Click **Yes** when the confirmation dialog box appears.

3. Follow the on-screen instructions.

Keyboard Shortcuts

Menu Bar	Keyboard Shortcut
File Menu	
Open Source	Ctrl+S
Open Target PST	Ctrl+T
Open Target Exchange Server	Ctrl+E
Close Store	Ctrl+L
User Data Wizard	Ctrl+W
Exit	Alt+F4
Edit Menu	
Copy Selection to Clipboard	Ctrl+C
Paste Copied Item(s)	Ctrl+V
Paste Special	Ctrl+Y
Delete	DEL
Rename	Ctrl+R
New Folder	Ctrl+N
New Mailbox	Ctrl+M
Move To Folder (Microsoft Exchange Server as a target - Find window)	Ctrl+Shift+V
Cut (Microsoft Exchange Server as a target - Find window)	Ctrl+X

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Menu Bar	Keyboard Shortcut
View Menu	
Refresh Screen	F5
Tools Menu	
Integrity Check	Ctrl+I
Export	Ctrl+P
Create Reports	Ctrl+Q
Find	F3
Online Help	
View Help	F1

Enabling the Licensed Agents

SPGRE users have the option to purchase unique add-on features for enhanced search and analysis capabilities.

ShadowProtect Granular Recovery for Exchange Agent	Versions Supported
Agent for Exchange	Not applicable
Agent for Advanced Searching for Exchange	Not applicable

To view the currently enabled Agents

- On the **Help** menu, click **About** and then click **License Info**.

To enable an Agent

1. Contact a sales representative and specify which agent you want to purchase. A license file containing the newly enabled agent will be sent to you.
2. Replace the existing .ini file with the new .ini file. The default location for this file is in the SPGRE directory.

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The License File

All SPGRE editions for Exchange require a license file. The purpose of this file is to let you buy only those features you need. Before SPGRE is enabled, it checks the .ini file for five things:

- The license file must be valid for SPGRE 6.1.
- Mailbox limit if applicable.
- Server name enforcement if applicable. Allows users to open EDB files only from the licensed server names.
- Subscription length if applicable.
- Enabled Agents (SPGRE Agents)

Tip: *If you have a license file with a 100 mailbox limit and you attempt to open an EDB file with 101 mailboxes, the file will not open.*

Note: *To view and/or change the location of the license file, see "Setting Preferences" on page 26. In the SPGRE Preferences window, click the Options tab and read the instructions for the "License file name" preference.*

About the Exchange Database

The Exchange database consists of the following files:

- **.edb file (rich text database file)** contains data placed in the store through Messaging Application Programming Interface (MAPI), as well as all the database tables that define mailboxes, messages, folders, and attachments.
- **.stm file (streaming database file)** contains common Internet formatted content, such as Multipurpose Internet Mail Extensions (MIME) content, that protocols other than the MAPI protocol place in the store.

  Note: *The .stm file is new to Exchange 2000. Exchange 5.5 does not contain .stm files.*

- **.log files (transaction logs)** are history files recording server activity. These files are useful in restoring and backing up Exchange data. Transaction logs for Exchange Server 5.5, 2000, and 2003 are 5 MB in size. Transaction logs for Exchange Server 2007 and Exchange Server 2010 are 1 MB in size.

  Each storage group uses its own set of transaction log files. For example, if a storage group contains five stores, all transactions for all five stores are recorded in a single series of transaction log files. You can determine where to locate the transaction log files for each storage group.
- **.chk (check) files** are checkpoint files used for recovering (playing) data from transaction logs into EDB files. The checkpoint is the place marker in the EDB.CHK file that indicates which transactions have been committed. Whenever data is written to an EDB file from the transaction log, the EDB.CHK file is updated with information specifying that the transaction was successfully committed to the respective EDB file. Separate Exx.chk files are maintained for each storage group using ESE (Extensible Storage Engine).

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- **.pat (patch) files** are used to record information on page splits in Exchange 5.5 through Exchange 2000 (SP1). In Exchange 2000 (SP2) and later, the functionality provided by .pat files is incorporated into Exchange log files.

Organizing the Exchange Database Files for SPGRE

For best results when using an online incremental or differential backup

- Put the .edb, .stm, and .pat files in one directory.
- Put the associated log files (for example, .log, .chk) in one directory.

Note: *The two directories can be different.*

SPGRE does not require .stm or .log files, but you should include them to ensure that all email data is recovered. You may get corruption errors if these files are not present.

If you are using an offline backup

You need to use the .edb and .stm files for offline backups. To ensure that all email data is recovered, you should also include all .log files, as well as .pat and .chk files if they exist. SPGRE performs its own verification process and includes the .log and .pat files to determine if it needs them to recover the data.

Upgrading ShadowProtect Granular Recovery for Exchange

If a previous version of ShadowProtect Granular Recovery for Exchange has been installed, is active, and you are upgrading to ShadowProtect Granular Recovery for Exchange 6.1, you will not be able to reuse the existing ShadowProtect Granular Recovery for Exchange license file with ShadowProtect Granular Recovery for Exchange 6.1.

Getting Help

StorageCraft Technology Corporation provides you with the following ways to get help with SPGRE: “Online Help” and “Technical Support”.

Online Help

Online Help includes all of the information in the user guide and more, and it lets you quickly access this information by using one of three tabs. The Contents tab offers a hierarchical view of the contents of the user guide. The Search tab offers a full-text search of the user guide. The Index tab offers a keyword-based way to get to specific topics.

To start online Help

Do one of the following:

- On the **Help** menu, click **Contents**.
- Click on the toolbar.

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- Press the **F1** key.

To identify a tool or control

- Position the pointer over a tool or control, and then pause. A tool tip shows the name of the item.

Technical Support

If you have questions or problems not answered in the user guide or the online Help (F1), call our Technical Support group. When reporting an issue, please include any information that might help us diagnose the problem. The following details are often the most helpful:

- The version of SPGRE you are using (on the **Help** menu, click **About**).
- The versions of Windows operating systems and Outlook that you are running.
- The version of Exchange that contained the source EDB file.
- The circumstances and sequence of steps that led to the problem.
- The text of the error messages (if any appeared), and the contents of the **Details** window.
- A list of other Windows-based programs that you were running when the error occurred.

See “Contact Information” at the beginning of this user guide.

Conventions in this Manual

This manual uses guidelines for documenting menu commands and shortcuts; commands available on shortcut menu; and notes and tips.

Menu Commands and Shortcuts

This manual uses the following conventions for documenting menu commands and shortcuts:

Example	Describes
On the **File** menu, point to **Target PST**, and then click **Create New**.	Choosing the Create New command on the Target PST submenu on the File menu.
On the **Edit** menu, click **Paste Special**.	Choosing the Paste Special command on the Edit menu.
Press **Ctrl+S** (Open source EDB)	Holding down the Ctrl key and the S key at the same time and then releasing them.
Right-click	Clicking the right mouse button.

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Shortcut Menu

You can access many of the same commands available on the menu bar and toolbar by right-clicking the mouse to display a shortcut menu. The contents of the shortcut menu depend on whether you right-click in the source or target pane. This manual seeks to teach you how to use commands on the menu bar and toolbar, and doesn't always specify when you can use the shortcut menu. Once you become familiar with SPGRE, the commands available to you on the shortcut menu should become apparent.

Notes and Tips

The notes and tips in this user guide follow the guidelines offered in the *Microsoft Manual of Style for Technical Publications*, 3rd Edition. Redmond, WA: Microsoft Press, 2004.

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CHAPTER 1

LOOKING AT THE INTERFACE

Overview

This chapter describes the parts of the main window of ShadowProtect Granular Recovery for Exchange (SPGRE) and shows you how to preview messages, view details of an EDB, PST, or CAS file, and change the view.

Main Window

The main window is where you do most of your work. This window displays the source EDB, PST, or CAS file(s) as well as the target PST file(s), Exchange Server or CAS. The target acts as a container for the restored files. The various work areas and controls are described in the following sections.

Note: *In the illustration below, the target pane displays a PST that acts as a container for restored files. Keep in mind that the target pane could just as easily display an Exchange Server.*

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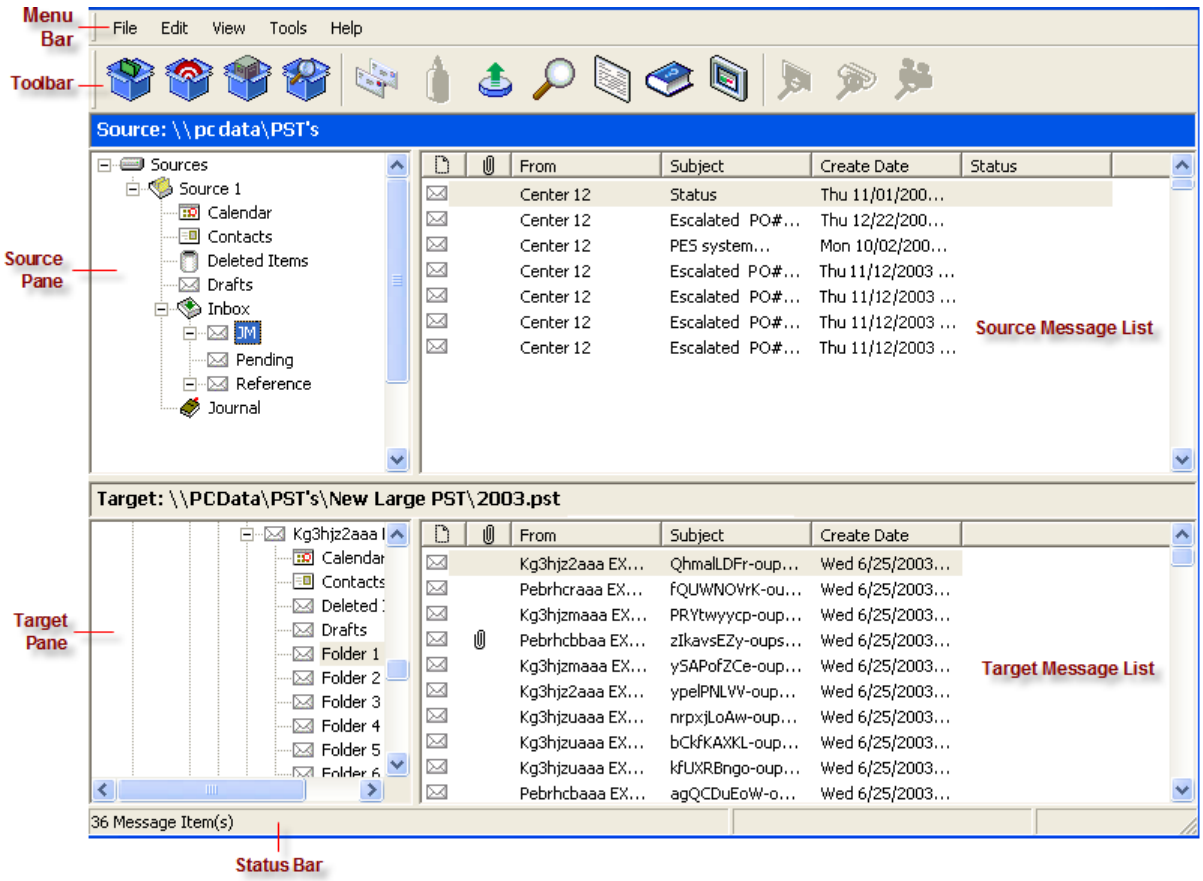

Figure 3-1. The main window with four panes

Source Pane

The source pane displays the data you intend to recover, such as the EDB file(s) or a content analysis store (CAS). It can also display one or more PST files if you have purchased the “PST as Source File” agent.

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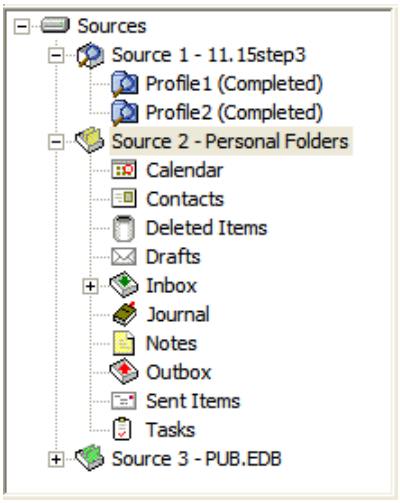

Figure 3-2. Sample icons with descriptions below

	Sources Root Node contains one or more source data stores that are pre-pended with a "SourceX" where X is a number starting with 1 and is incremented for each additional source opened. You can select the sources root node as your search source.
	Source EDB File (for example, Source 3 - PUB.EDB) contains the Exchange Information Store data. Click the plus sign (+) next to an EDB file to expand its contents.
	Mailbox (for example, Personal Folders) contains the Outlook folders. Click the plus sign (+) next to a mailbox to expand its contents.
	Outlook Folders (for example, Inbox, Contacts, Tasks) contain Outlook message items. Select a folder to view its contents in the source message list.
	Source CAS File (for example, Source 1) contains the content analysis store data created to analyze content based on certain criteria.
	CAS Profile Folder (for example, Profile2 (Completed)) which contains the results of a content analysis.
	Inaccessible Mailbox which displays if a mailbox is inaccessible. An inaccessible mailbox will present no visible content. Target mailbox access is controlled by the target Microsoft Exchange Server.

Note: *In the above illustration, the source pane displays an EDB file, but it could just as easily display a PST file, CAS, or even multiple EDB and PST files.*

Source Message List

The source message list displays the message items in the Outlook folder that you selected in the source pane. This folder is one of the Outlook folders (for example, Inbox, Contacts, Tasks). In the illustration below, the source message list displays the messages in an Inbox.

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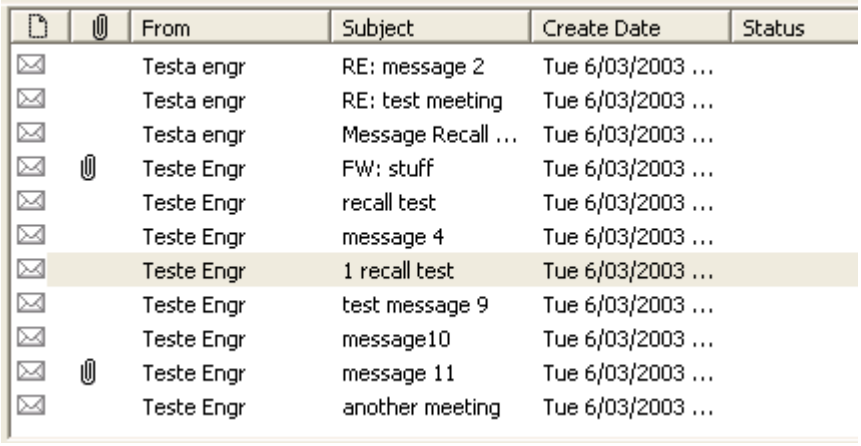

		From	Subject	Create Date	Status
✉		Testa engr	RE: message 2	Tue 6/03/2003 ...	
✉		Testa engr	RE: test meeting	Tue 6/03/2003 ...	
✉		Testa engr	Message Recall ...	Tue 6/03/2003 ...	
✉	📎	Teste Engr	FW: stuff	Tue 6/03/2003 ...	
✉		Teste Engr	recall test	Tue 6/03/2003 ...	
✉		Teste Engr	message 4	Tue 6/03/2003 ...	
✉		Teste Engr	1 recall test	Tue 6/03/2003 ...	
✉		Teste Engr	test message 9	Tue 6/03/2003 ...	
✉		Teste Engr	message10	Tue 6/03/2003 ...	
✉	📎	Teste Engr	message 11	Tue 6/03/2003 ...	
✉		Teste Engr	another meeting	Tue 6/03/2003 ...	

Figure 3-3. The Source Message List

The source message list displays metadata about the message items in six columns. The metadata includes file type; attachments, if any; message sender; subject; date; and status. The Sent Items folder also displays the "To" column. For more information on the message list, see "Sorting Messages in the Message Lists" on page 20.

The source content analysis store message list includes file type; Database #, Database, and Path. The source content analysis store profile folder message list includes file type; Attachment, if any; From; Subject; Create Date; Database #; Folder, and Status. For more information on content analysis stores, see "Content Analysis Store" on page 117.

Target Pane

The target pane can display one or more target PST files and/or one target mailbox, public folders and mailboxes from an Exchange Server, and content analysis stores (CAS) with profile folders. The target acts as a container for your restored files. If a target is a newly created PST file, it defaults to 10 Outlook folders. If a target is an existing PST file or Exchange Server, it shows whatever folders are in the target. It is into these folders that you paste and restore your message items. For information on restoring message items, see "Restoring Exchange Data" on page 87.

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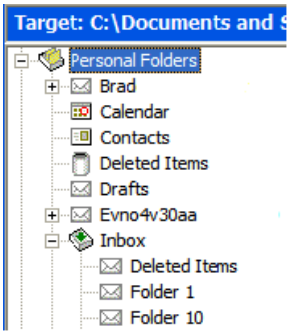
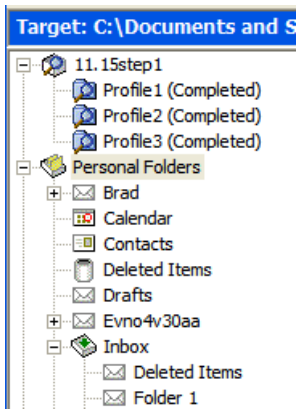
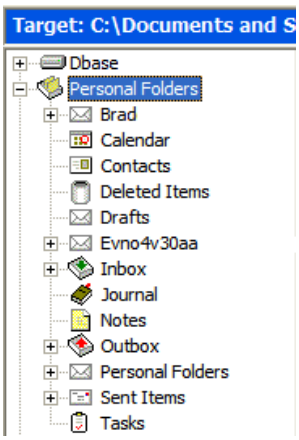


Target pane with PST files



Target pane with CAS files



Target pane with Exchange Server

Figure 3-4. Target panes with PST, CAS, and Exchange Server files

Target Message List (Restored Messages)

The target message list displays the message items in the Outlook folder that you selected in the target pane. If the target is a newly created PST file or CAS, the Outlook folders and message list will be empty. If the target is an existing PST file, CAS file, or Exchange Server, or if you have restored message items to a newly created PST file, you can select a folder in the target pane to display messages in the target message list.

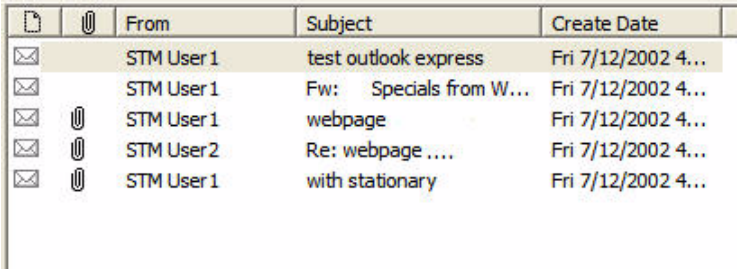


Figure 3-5. Target Message List Displaying Restored Messages

The target message list displays metadata about the message items in five columns (instead of six columns in the source message list). The metadata includes file type; attachments, if any; message sender; Subject; and Create Date. The Sent Items folder also displays the "To" column. For more information on the message list, see "Sorting Messages in the Message Lists" on page 20.

The target content analysis store message list includes file type; Database #, Database, and Path. The target content analysis store profile folder message list includes file type; attachment, if any; From; Subject; Create Date; Database #; Folder; and Status. For more information on content analysis stores, see "Content Analysis Store" on page 117.

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Menu Bar

Figure 3-6. The Menu Bar in the main window

The menu bar contains most of the commands for the SPGRE. The menu commands, submenu commands, and resulting windows are discussed fully in the chapters that focus on those specific commands. See the Index to quickly locate the pages on which a menu command is discussed.

Toolbar

Figure 3-7. The Button Toolbar in the main window

The buttons on the toolbar perform the following functions:

	Open Source displays the Open window, which lets you navigate to and select a source Exchange Database (EDB), PST, or CAS file. The EDB, PST, or CAS file contains the message items you want to restore.
	Open Target PST displays the Open window, which lets you navigate to and select a target Personal Folders (PST) file. The target PST file is a container for restored message items.
	Open Target Exchange Server displays the Connect to Exchange Server window, which lets you connect to a target Exchange Server. The target Exchange Server is a container for restored message items.
	Create/Open Content Analysis Store displays the Create Content Analysis File window which allows you to open an existing content analysis store or to create a new one in the target pane.
	Copy copies into the Clipboard the selected message(s) in the source message list; or the selected folder, mailbox, or EDB file in the source pane.
	Paste inserts the items from the Clipboard into the selected folder in the target pane. If you want to retain the directory structure of the restored messages, you must use the Paste Special command instead of the Paste command or Paste button.
	Export displays the Export window, which lets you export messages to a local or network drive destination. You can choose to save exported messages as plain text files (.txt) or as Microsoft Outlook files (.msg). You can also export EDBs to a PST.
	Search displays the Find window, which lets you specify the desired search criteria for finding messages in the source pane.

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	Preview Pane displays the Preview pane on the SPGRE main window so you can read a message without opening it.
	View Help displays SPGRE Online Help, which includes all of the information in this user guide and more. Online Help lets you quickly access this information by using a Contents, Search, or Index tab.
	Message Table View is only available when a message in the source message list is highlighted. It opens a Message Table View of that message and any message related to it.
	Attachment Table View is only available when a message with an attachment in the source message list is highlighted. It opens an Attachment Table View of that message and attachment and all related messages and attachments.
	Conversation View is only available when a message in the source message list is highlighted. It shows the thread of that message with indentions to indicate the responses to each e-mail.

Previewing and Opening Messages

In the Preview pane, you can read the contents of a message item and open attachments. You can preview a message located in either the source message list or the target message list. The information displayed in the Message Header is different for messages, calendars, contacts, tasks, and distribution lists.

To open the preview pane

Do one of the following:

- On the **View** menu, click **Preview Pane**.
- On the toolbar, click the **Preview Pane** icon in the toolbar.

To hide the preview pane

- Repeat one of the previous steps.

Tip: *Hiding the Preview pane will allow you to scroll through messages faster.*

To display a message in the preview pane

1. In the source or target message list, select a message.
2. Open the Preview pane by clicking on the **Preview Pane** icon in the toolbar.

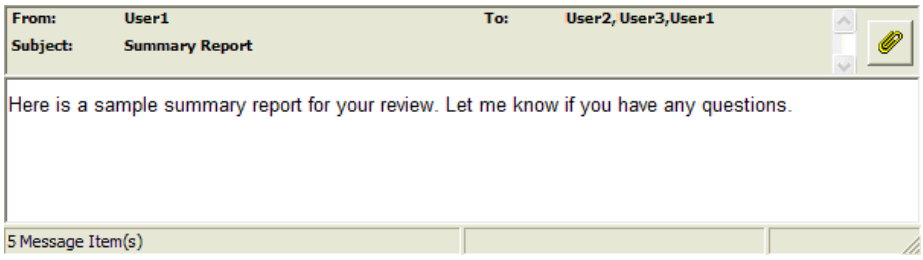

Figure 3-8. Preview pane for a message

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To open a message in its own window

- In the source or target message list, double-click a message.

Opening Attachments

If you have the appropriate program installed on your computer, SPGRE will load the application to view the selected attachment (for example, to view an .xls file attachment, SPGRE will launch MS Excel).

If no associated program is available for the attachment's file type, SPGRE presents a message window saying the attachment cannot be viewed.

Note: SPGRE *cannot view attached embedded graphics in HTML messages.*

To open an attachment in an open message

1. In the message list, double-click a message that has the Attachment icon next to its name.
2. Click the **Attachment** icon on the right side of the message header. A pop-up window lists the attachments for the selected message.
3. Click the name of the attachment you want to view.

To open an attachment in the preview pane

1. In the message list, select a message that has the Attachment icon next to its name.
2. Open the Preview pane. In the SPGRE main window, click the **Preview Pane** icon . In the **Find** window, select the **Preview** check box.
3. Click the **Attachment** icon on the right side of the message header in the Preview pane. A pop-up window lists the attachments for the selected message.
4. Click the name of the attachment you want to view.

Saving Attachments

A "save attachments" option is available on the File menu and paperclip menu of an open message, as well as on the paperclip menu of the Preview pane. The Save Attachments window lists the attachments for the selected message and lets you select the attachments you want to save.

To save attachments in an open message

1. In the source or target message list, double-click a message that has the Attachment icon next to its name.
2. In the open message, do one of the following:
   - On the **File** menu, click **Save Attachments**.
   - Click the **Attachment** icon on the right side of the message header, and then click **Save Attachments**.
3. In the **Save Attachments** window, select one or more attachments, and click **OK**.

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4. In the **Browse For Folder** window, select a location for the attachment(s), and click **OK**.

To save attachments in the preview pane

1. In the source or target message list, select a message that has the Attachment icon next to its name.
2. In the Preview pane, click the **Attachment** icon on the right side of the message header, and then click **Save Attachments**.
3. In the **Save Attachments** window, select one or more attachments, and click **OK**.
4. In the **Browse For Folder** window, select a location for the attachment(s), and click **OK**.

Changing the View

You can change the view in the SPGRE window by hiding the toolbar or status bar, by using split bars; by sorting message lists; and by refreshing the screen.

Viewing or Hiding the Toolbar and Status Bar

The toolbar and status bar appear by default in the main window of SPGRE, but you can easily hide them.

To hide the toolbar or status bar

- On the **View** menu, click **Toolbar or Status Bar**. The check mark no longer appears next to the name of the toolbar or status bar.

To view the toolbar or status bar

- On the **View** menu, click **Toolbar or Status Bar**. The check mark appears next to the name of the toolbar or status bar.

Resizing Panes Separated by a Split Bar

You can use a split bar (the horizontal or vertical double line that separates two panes) to increase the area within one pane while simultaneously decreasing the area within the adjacent pane. The source pane, source message list, target pane, target message list, and Preview pane all border a split bar.

To resize panes separated by a split bar

1. Position the cursor over a split bar between two panes until a double arrow ⟷ appears. A vertical double arrow ↕ appears if you position the cursor over a horizontal split bar.

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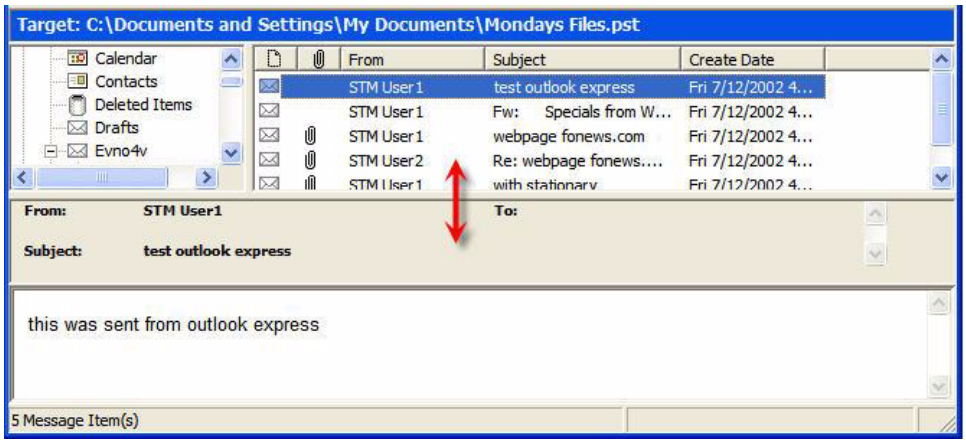

Figure 3-9. Before dragging the split bar between the target message list and the Preview pane

2. Drag the split bar until the two panes are the desired size.

Sorting Messages in the Message Lists

You can sort messages in the source and target message lists based on attachments, message sender, subject, date, and status. In addition, the source message list lets you sort messages based on status, and the Sent Items folder lets you sort items based on the "To" heading. Sorting messages on the From column, for example, can help to identify messages from a specific sender.

To sort a message list

1. Click a column heading to sort the messages based on that heading. For most headings, an arrow appears indicating the sort direction. An up arrow indicates that the messages appear in ascending (A-Z) order. A down arrow indicates that the messages appear in descending (Z-A) order.
2. To reverse the order of the messages based on that column heading, click the column heading again. Notice the arrow reverses directions.

An example of sorting messages

- If you click the attachment column heading, messages are sorted in ascending order based on this heading, even though no arrow appears. This means that messages with attachments appear at the top of the message list, while messages with no attachments appear at the bottom of the document list. If you click the attachment column heading again, the order is reversed.

Note: *The view settings (sort order and column width) for a folder or mailbox are saved until you close the data store.*

Refreshing the Screen

You may want to refresh the screen occasionally when you are connected to a target Exchange Server. That is because the information on the server may change while you are connected.

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To refresh the screen

Do one of the following:

- On the **View** menu, click **Refresh**.
- Press the **F5** key.

Viewing the Properties of an EDB File, PST File, CAS File, CAS Profile Folder, Folder, or Mailbox

SPGRE makes it easy to view the properties of a source PST file, EDB file, CAS file, CAS profile folder, mailbox, or folder.

Note: *Only accessible mailboxes can produce property reports. For CAS files, inaccessible mailboxes within that data store are not included in the totals.*

Note: *When the **Show Recoverable Items (Exchange Server 2010)** preference is enabled, the **Recoverable Items** folder, subfolders, and messages will appear in the folder and message counts in the EDB properties. If the preference is cleared, the **Recoverable Items** folders and messages are not included in the folder and message counts.*

To view the properties

1. In the source pane, right-click an EDB file, PST file, CAS file, CAS profile folder, mailbox, or folder.
2. On the shortcut menu, click **Properties**. A Properties dialog box appears.

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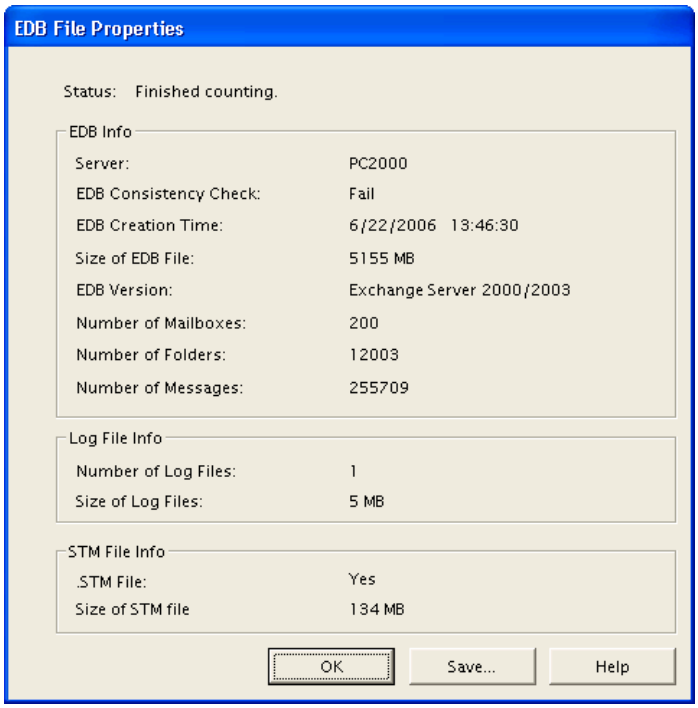

Figure 3-10. EDB File Properties dialog box

Click **Save** to save the Exchange Server name to your hard drive.

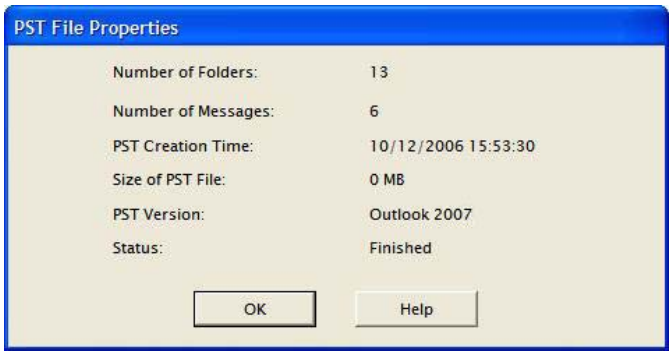

Figure 3-11. Properties of a PST File

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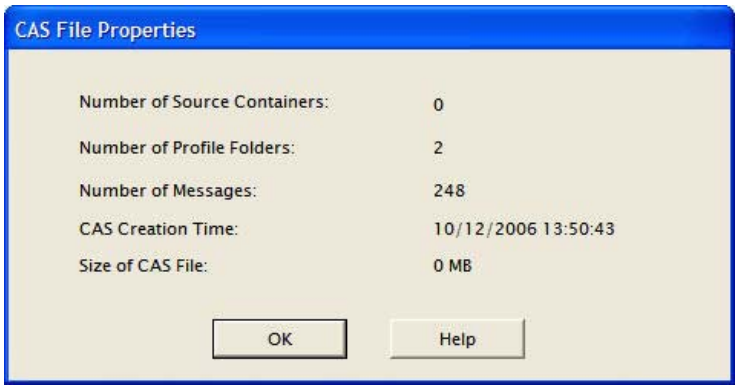

Figure 3-12. Properties of a Content Analysis Store (CAS) File

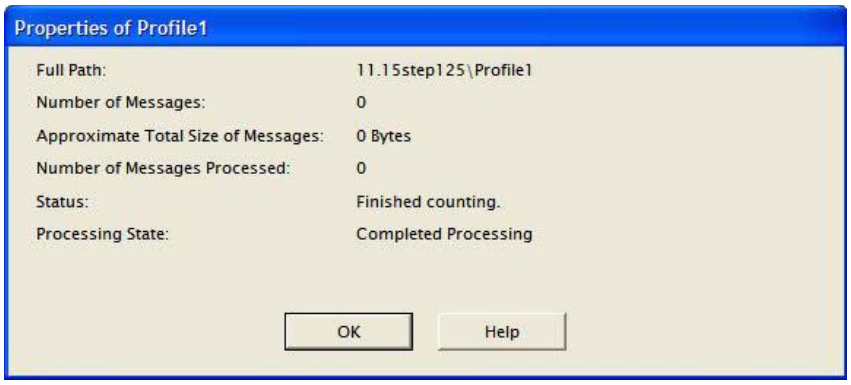

Figure 3-13. Properties of a Content Analysis Store (CAS) Profile Folder

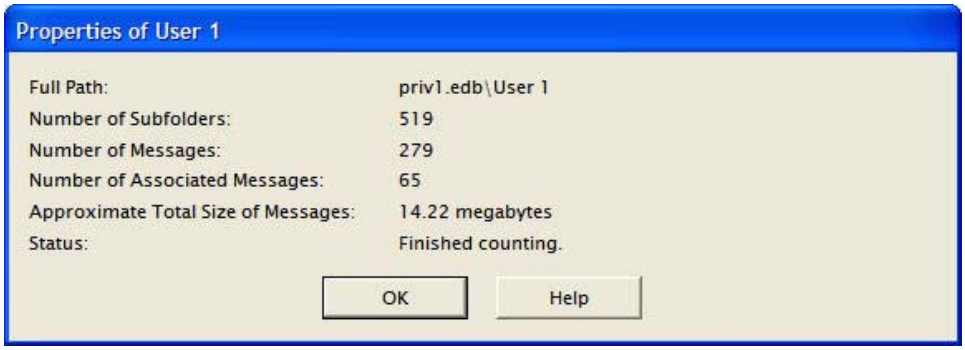

Figure 3-14. Properties of a Mailbox

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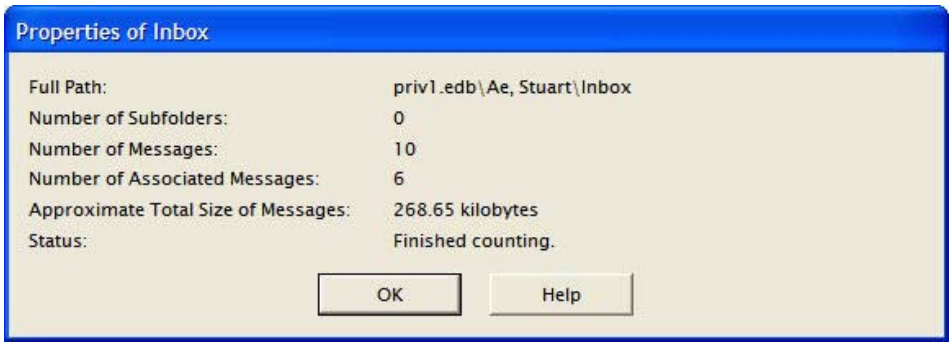

Figure 3-15. Properties of a Folder

An alternate way to view the properties of an EDB or PST file

Once you have viewed the properties of the source EDB or PST file as described above, you can then display the properties in the Preview pane.

1. Open the Preview pane by clicking the **Preview Pane** icon on the toolbar or by clicking the **View** menu and pointing to **Preview Pane**.
2. Right-click on the source EDB or PST file in the **source** pane and click **Properties**.

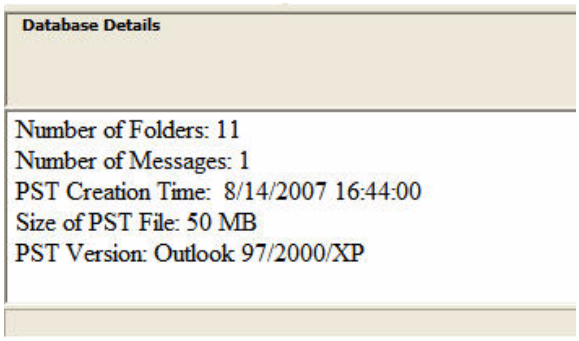
Database Details
Number of Folders: 11
Number of Messages: 1
PST Creation Time: 8/14/2007 16:44:00
Size of PST File: 50 MB
PST Version: Outlook 97/2000/XP

Figure 3-16. Properties of an EDB File

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Performing an Integrity Check

You can perform an integrity check on messages, folders, mailboxes, PST files, CAS files, CAS profile folders, EDB files, and live Exchange Server target search results. During the integrity check, SPGRE verifies that it can read all folder and message properties from the selected source.

To perform an integrity check

1. In the source pane, select an EDB file, PST file, CAS file, CAS profile folder, mailbox, folder, or message(s).
2. Do one of the following:
   - On the **Tools** menu, click **Integrity Check**. The **Integrity Check** window appears.
   - Right-click the item and click **Integrity Check** in the shortcut menu.
3. Click **Print** to print a copy of the integrity check.
4. Click **Save** to save a copy of the integrity check to file.

Viewing Deleted Messages

SPGRE can view and restore deleted messages that are held in the EDB file. These messages appear under the Status column in the source message list. If deleted messages have been purged from the EDB file due to the deleted retention schedule, SPGRE cannot view or restore these messages.

Content analysis store deleted messages in both the source and target panes also appear under the Status column in the message list.

Viewing Deleted Items in Exchange Server 2010 Databases

Deleted items do not have the same functionality as items from earlier databases. Instead of being stored in the folder they were deleted from, they are stored in a separate folder called “Recoverable Items.”

By default, this separate folder is not displayed in the source tree under the mailbox. A preference setting allows you to display this folder in the source tree making the deleted items accessible to you. See Setting Preferences in the “Security Tab” on page 28 for more information.

Recoverable Items Folder

When the Recoverable Items folder is visible to you, the subfolders are accessible as well including:

- **Deletions:** The Deletions folder holds messages that have been removed from the Inbox using the Delete key, menu item, or shortcut key.
- **Purges:** The Purges folder holds messages that have been removed from a mailbox via the “Recover Deleted Items” tool in Outlook when a legal hold is set for a mailbox.
- **Versions:** The Versions folder holds sent and received messages that were edited by a user in a mailbox for which a legal hold was set.

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You are able to perform source operations on the messages, including copying and exporting. The message in Recoverable Items and its subfolders are also included in searching, creating reports, integrity checks, and property counts.

Note: *The displaying of Recoverable Items in Exchange Server 2010 applies to sources only. They are not visible in target mailboxes.*

Setting Preferences

The Preferences window allows you to streamline SPGRE operations. Most of the preference settings in the three tabs are selected by default. There are two exceptions: the "Display new PST when PST limit is reached" setting in the Options tab, and the "Enable Tamper-Proof Target" setting in the Security tab. If you change the settings, they are stored and reloaded on the next run of SPGRE.

To change preference settings

1. On the **Edit** menu, click **Preferences**.
2. Select or clear the check boxes in the three tabs, as desired.

Options Tab

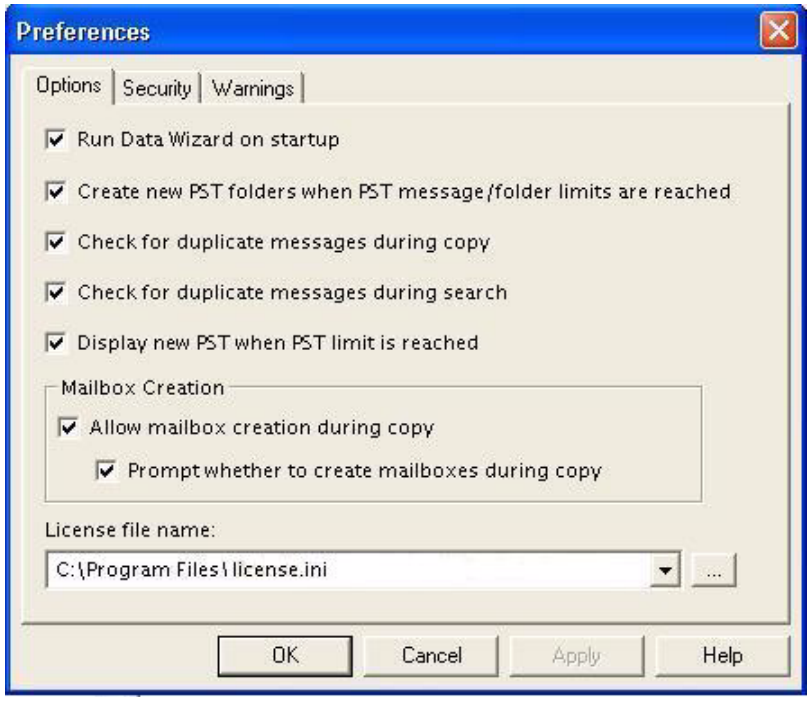

Figure 3-17. The Options Tab in Preferences

- **Run Data Wizard on startup:** The Data Wizard will launch every time you open SPGRE.

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- **Create new PST folders when PST message/folder limits are reached:** SPGRE will automatically create new folders (for example, Inbox) when the 16,383 messages/folder limit is reached. After SPGRE creates a new folder, it continues to restore Exchange data where it left off. For more information, see “Limits for PST and Folder Targets” on page 88.
- **Check for duplicate messages during copy:** When restoring Exchange data, SPGRE does not copy duplicates of a message to the destination folder if a message already exists in the destination folder. Selecting this preference setting results in slower copy performance.
- **Check for duplicate messages during search:** SPGRE will not return duplicates of a message during a search. For example, if the same message exists in two or more data stores, only the first message found is listed in the search results. Selecting this preference setting results in slower search performance.
- **Display new PST when PST limit is reached:** When the limit for a PST is reached in the target pane, SPGRE automatically displays the overflow PST.
- **Allow mailbox creation during copy:** If this option is selected and a mailbox copy is initiated by you, mailboxes can be created during a mailbox copy. If it is cleared, mailbox creation cannot take place during copy. This setting has no effect on manual mailbox creation.
  - **Prompt whether to create mailboxes during copy:** If this option is selected, you are prompted at the beginning of a copy and are asked if mailboxes should or should not be created. When it is cleared, mailbox creation occurs automatically. This setting is only in effect when **Allow mailbox creation during copy** is enabled. This setting has no effect on manual mailbox creation, or during a single mailbox copy.
- **License file name:** This box displays the current location of the license file. To put this file in a different location, click Browse and navigate to the desired location. There are two ways to manage the location of the license file:
  - **Multiple Copies of SPGRE:** Put one license file in the SPGRE program directory of each SPGRE installation.
  - **Single Copy of SPGRE:** Put one license file in a single network folder to which all SPGRE installations make reference.

Note: *For more information about the license file, see “The License File” on page 7.*

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Security Tab

The options in this tab are modifiable by default only by users that belong to the Administrator Group. The options are stored in the registry: HKEY_LOCAL_MACHINE\SOFTWARE\StorageCraft\ShadowProtect GRE.

The SPGRE Installation program sets this registry key to have read/write access to users in the Administrators group and read-only access by any user in the Users group.

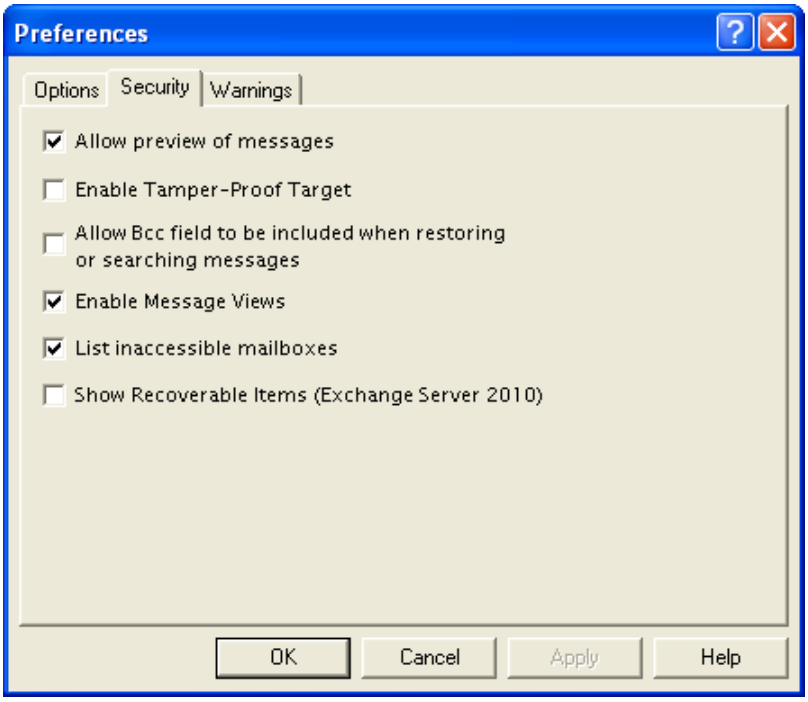

Figure 3-18. The Security Tab in Preferences

- **Allow preview of messages:** If this option is not selected, you will not have the ability to open or preview messages in the source or target.
- **Enable Tamper-Proof Target:** If this option is selected, SPGRE does not allow you to delete messages or folders in the target or have the ability to rename folders in the target. You only have the ability to add (copy) to the target.
- **Allow Bcc field to be included when restoring or searching messages:** If this option is selected, SPGRE includes Bcc information when restoring or searching messages. This means that a recipient is able to see Bcc recipients that he or she was not intended to see. It also means that searching with the "Sent to" option returns messages for Bcc recipients.
- **Enable Message Views:** If this option is selected, it makes the Message Views available.
- **List inaccessible mailboxes:** If this option is selected, the inaccessible mailboxes listed in the directory are shown. They are for display only.
- **Show Recoverable Items (Exchange Server 2010):** Selecting this option allows the "Recoverable Items" folder to be displayed under the your mailbox, enabling you to have access to any deleted items. It also provides access to the "Purges" and "Versions" folders, which are also sub-folders of "Recoverable Items."

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Important: *Selecting the Show Recoverable Items (Exchange Server 2010) preference causes your Exchange Server 2010 EDB sources to close. A warning message appears giving you the option to cancel or continue changing the setting.*

Warnings Tab

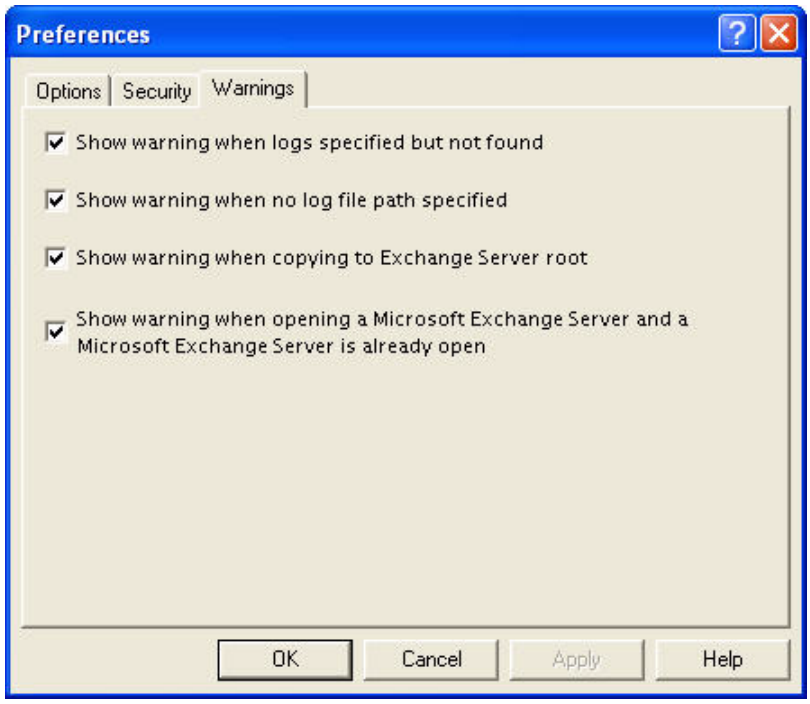
Preferences
Options
Security
Warnings
Show warning when logs specified but not found
Show warning when no log file path specified
Show warning when copying to Exchange Server root
Show warning when opening a Microsoft Exchange Server and a Microsoft Exchange Server is already open
OK
Cancel
Apply
Help

Figure 3-19. The Warnings Tab in Preferences

- **Show warning when logs specified but not found:** SPGRE warns you when opening an EDB file if no .log files were found at the specified directory.
- **Show warning when no log file path specified:** SPGRE warns you when opening an EDB file if a .log file path has not been specified.
- **Show warning when copying to Exchange Server root:** SPGRE warns you when you are about to copy a large amount of data to the Exchange Server root.
- **Show warning when opening an Exchange Server and an Exchange Server is already open:** This warning appears when you attempt to connect to either a single mailbox or all mailboxes on an Exchange Server when a target Exchange connection is already open in SPGRE.

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CHAPTER 2

USING SHADOWPROTECT GRANULAR RECOVERY FOR EXCHANGE (SPGRE)

Overview

You can open a source Exchange Database (EDB) file or PST file and specify a target PST file or target Exchange Server by using one of the following methods:

- Use the Data Wizard.
- Open the source database and target mailboxes from the ShadowProtect Granular Recovery for Exchange (SPGRE) main window.

Note: *You cannot open the same PST file as both source and target.*

Using ShadowProtect Data

In order for SPGR to operate fully, you must first mount a ShadowProtect image file containing the data you wish to open. For more information on mounting image files, refer to the ShadowProtect software documentation.

Running the Data Wizard

The first time you start SPGRE, the Data Wizard starts. The Data Wizard guides you through the loading of the Exchange Database (EDB), PST files, or content analysis store (CAS) files into SPGRE, and shows you how to specify the target PST file or Exchange Server.

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Data Wizard: Welcome Page

To start the Data Wizard

1. Click **Start**, and then point to **Programs**. Point to **ShadowProtect**, then select **Granular Recovery for Exchange**. The **Data Wizard** appears.
   - If you do not want to run the Data Wizard every time you start SPGRE, clear the **Run On Startup** check box.
2. Click **Next**.

Data Wizard: Source Path Selection

On the Source Path Selection page of the Data Wizard, specify the source EDB file path along with its log file path and temporary file path; or specify the source PST file or CAS file path. If you do not want to open a source EDB, PST, or CAS file at this time, click Skip.

Note: *Due to the database nature of the PST file and MAPI subsystem, PSTs opened as source are modified.*

To specify a source file

1. In the **Source File** box, click **Browse** to find the source EDB file, source PST file, or source CAS file.
2. If you specified a PST or CAS file path, proceed to step 5. PST files do not require log file or temporary file paths.
3. In the **Log File Path** box, click **Browse** to find the log files associated with the source EDB file.

   Important: *After you select an EDB file, the Log File Path box defaults to the source EDB file path, even if the log files are not in the same directory as the source EDB file. Therefore, make sure you enter the correct log file path in the Log File Path box.*

4. In the **Temporary File Path** box, accept the default location for .idx and .dat files, or specify a new location if they require more hard drive space. For more information, see “Guidelines for Selecting an Exchange Database” on page 33.

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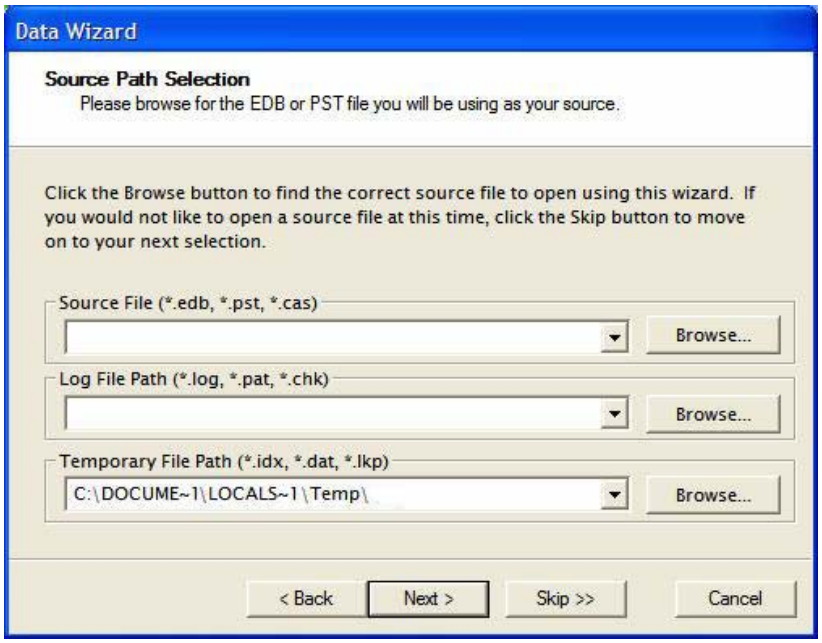
Data Wizard
Source Path Selection
Please browse for the EDB or PST file you will be using as your source.
Click the Browse button to find the correct source file to open using this wizard. If you would not like to open a source file at this time, click the Skip button to move on to your next selection.
Source File (*.edb, *.pst, *.cas)
Browse...
Log File Path (*.log, *.pat, *.chk)
Browse...
Temporary File Path (*.idx, *.dat, *.lkp)
C:\DOCUME~1\LOCALS~1\Temp\
Browse...
< Back
Next >
Skip >>
Cancel

Figure 2-1. Browse to the EDB or PST file to use as source

5. Click **Next**.

Guidelines for Selecting an Exchange Database

1. **For the best results when using an online incremental or differential backup:**
   - Put the .edb, .stm, and .pat files in one directory.
   - Put the associated log files (for example, .log, .chk) in one directory.

   Note: *The two directories can be different.*

   Note: *SPGRE does not require .stm or .log files, but you should include them to ensure that all email data is recovered.*

2. **If you are using an offline backup:** You need to use the .edb and .stm files. To ensure that all email data is recovered, you should also include all .log files, as well as .pat and .chk files if they exist. SPGRE performs its own verification process and will include the .log and .pat files to determine if it needs them to recover the data.
3. **For best results when specifying a temporary file path for .idx and .dat files:** Make sure you have a sufficient amount of hard drive space for .dat and .idx files. These files may require hard drive space equal to the size of the .log files. Therefore, you may need to change the default file path for .idx and .dat files if you need more space.

   SPGRE never modifies an .edb file or its associated files (for example, .log, .stm, .pat, .chk); however, it does create .dat and .idx files the first time you open an .edb file from a directory that contains log files. Each time you reopen the .edb file, SPGRE uses the information in the .dat and .idx files to open the .edb file more quickly.

   Note: *Exchange 5.5, Exchange 2007, and Exchange 2010 do not use .stm files.*

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Data Wizard: Target Type and Path Selection

On the Target Type and Path Selection page of the Data Wizard, specify the type and path of the target file you are using as the container for your restored data. You have four choices: 1) specify a PST file as the target for restored data; 2) specify an Exchange Server single mailbox connection as the target for restored data; 3) specify an Exchange Server all mailboxes connection as the target for restored data; or 4) specify a Content Analysis Store (CAS) file as the target for creation or processing. An option to open Public Folders is available upon connection to an Exchange Server.

Note: *Click* ***Skip*** *if you do not want to select a target file at this time.*

To specify a PST File as the target for restored data

1. Select the **PST File** option.

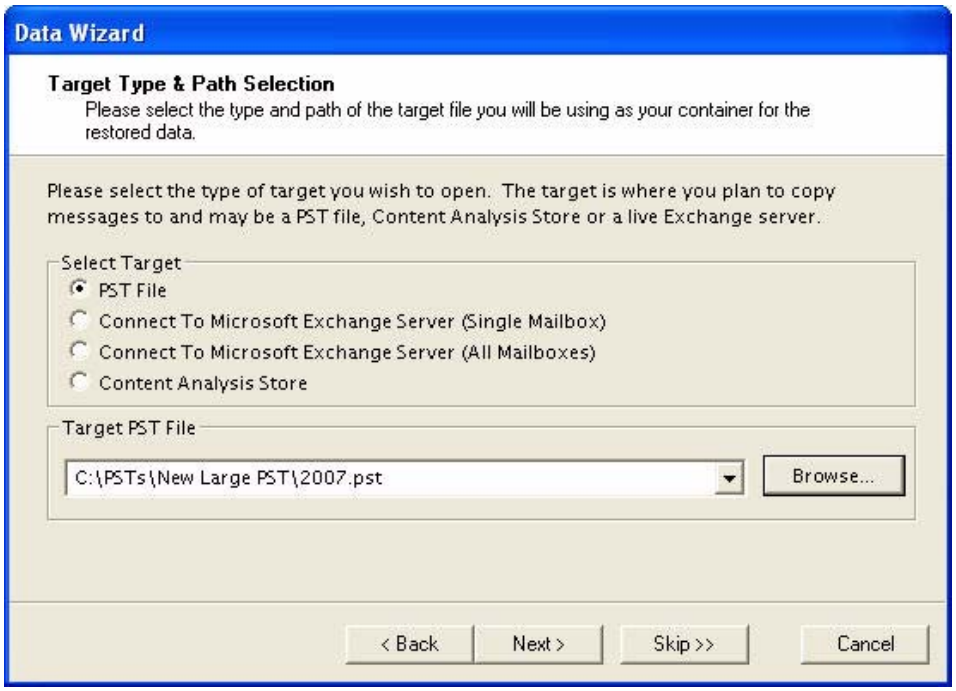
Data Wizard
Target Type & Path Selection
Please select the type and path of the target file you will be using as your container for the restored data.
Please select the type of target you wish to open. The target is where you plan to copy messages to and may be a PST file, Content Analysis Store or a live Exchange server.
Select Target
PST File
Connect To Microsoft Exchange Server (Single Mailbox)
Connect To Microsoft Exchange Server (All Mailboxes)
Content Analysis Store
Target PST File
C:\PSTs\New Large PST\2007.pst
Browse...
< Back
Next >
Skip >>
Cancel

Figure 2-2. Select the PST File option in the Target Type & Path Selection window

2. Do one of the following:
   - If you know the target PST file path, type it in the **Target PST File** path box.
   - Click **Browse** to open the **Create PST File** window, and navigate to the desired location. Then create a new PST file by typing a name in the **File name** box, or select an existing PST file. Next, click **Open**. The path of the target PST file appears in the **Target PST File** path box.
3. Click **Next**.

To specify an Exchange Server as the target for restored data for a single mailbox

1. Select the **Connect to Exchange Server (Single Mailbox)** option.

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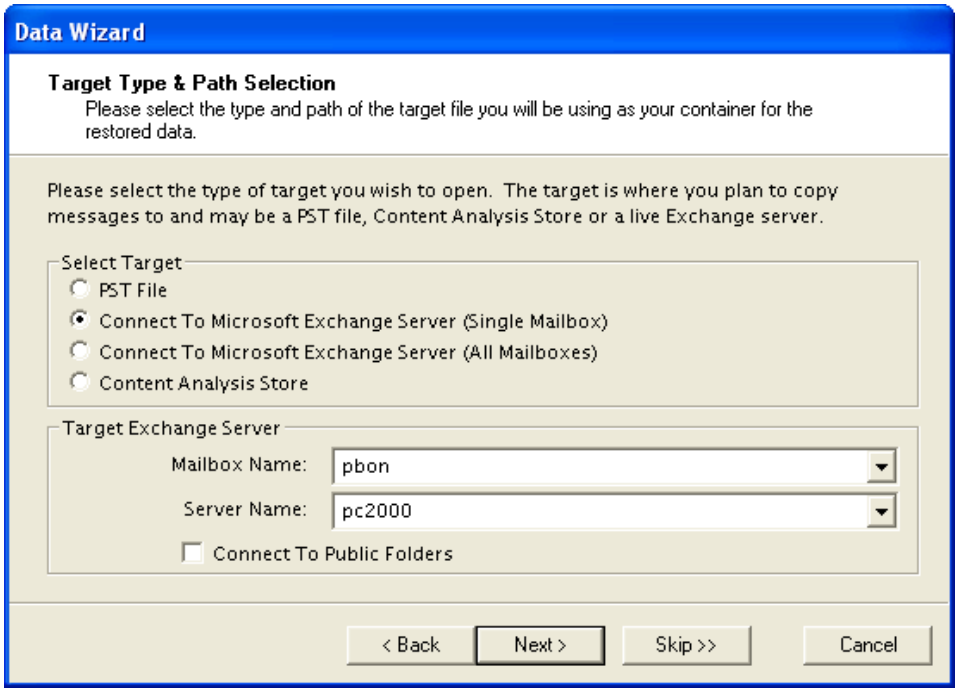
Data Wizard
Target Type & Path Selection
Please select the type and path of the target file you will be using as your container for the restored data.
Please select the type of target you wish to open. The target is where you plan to copy messages to and may be a PST file, Content Analysis Store or a live Exchange server.
Select Target
PST File
Connect To Microsoft Exchange Server (Single Mailbox)
Connect To Microsoft Exchange Server (All Mailboxes)
Content Analysis Store
Target Exchange Server
Mailbox Name:
pbon
Server Name:
pc2000
Connect To Public Folders
< Back
Next >
Skip >>
Cancel

Figure 2-3. Selecting Connect To Exchange Server (Single Mailbox) brings up the target Exchange Server section.

2. For **Mailbox** and **Server Name** boxes, type the mailbox and server names.

   Tip: *If you do not know the full name of the mailbox, type the first letter of the mailbox in the* ***Mailbox Name*** *box, and click* ***Next****. In the* ***Check Name*** *window that appears, select the mailbox from the list, and click* ***OK****.*

3. The **Connect to Public Folders** check box is selected by default. This feature allows you to open public folders as a target for restoring public folders or messages. If you do not want to restore to public folders, clear this check box. For more information, see “Restoring to Public Folders” on page 97.
4. If you are not connected to a domain, the **Enter Password** window appears. In this window, type a user name that has full rights to the mailbox, a password, and a domain name. Then click **OK**. This window may appear again, which will require you to reenter this information.
5. Click **Next**.

To specify an Exchange Server as the target for restored data for All Mailboxes

1. Select the **Connect to Exchange Server (All Mailboxes)** option.

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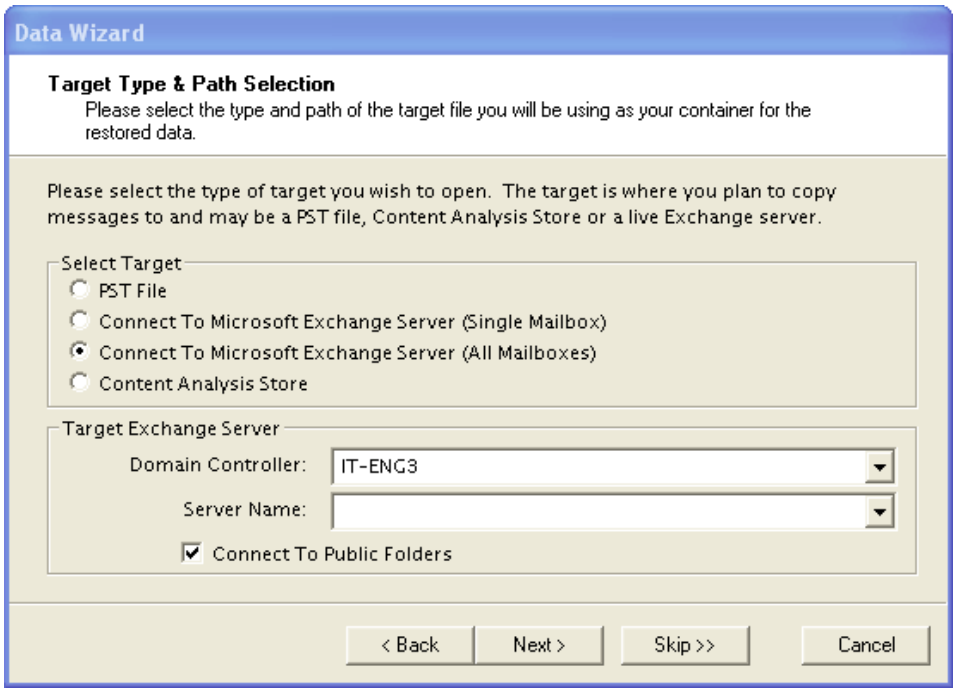
Data Wizard
Target Type & Path Selection
Please select the type and path of the target file you will be using as your container for the restored data.
Please select the type of target you wish to open. The target is where you plan to copy messages to and may be a PST file, Content Analysis Store or a live Exchange server.
Select Target
PST File
Connect To Microsoft Exchange Server (Single Mailbox)
Connect To Microsoft Exchange Server (All Mailboxes)
Content Analysis Store
Target Exchange Server
Domain Controller:
IT-ENG3
Server Name:
Connect To Public Folders
< Back
Next >
Skip >>
Cancel

Figure 2-4. Selecting Connect To Exchange Server (All Mailboxes) brings up the target Exchange Server section.

2. For **Domain Controller** and **Server Name** boxes, the domain controller and server names auto-populate.
3. The **Connect to Public Folders** check box is selected by default. This feature allows you to open public folders as a target for restoring public folders or messages. If you do not want to restore to public folders, clear this check box. For more information, see “Restoring to Public Folders” on page 97.
4. If you are not connected to a domain, the **Enter Password** window appears. In this window, type a user name that has full rights to the mailbox, a password, and a domain name. Then click **OK**. This window may appear again, which will require you to reenter this information.
5. Click **Next**.

To specify a content analysis store

1. Select the **Content Analysis Store** option.

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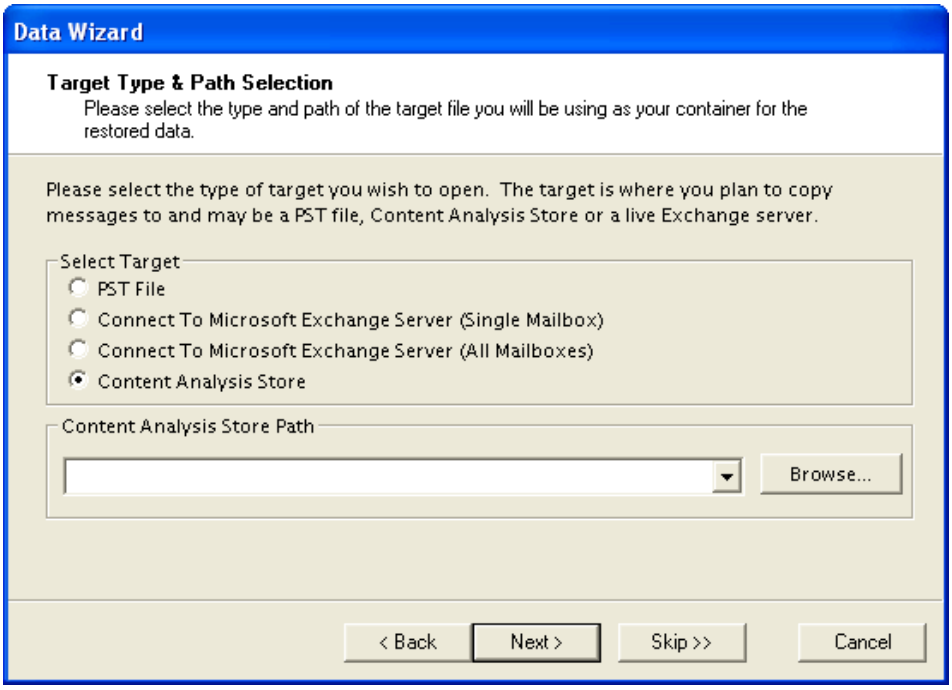
Data Wizard
Target Type & Path Selection
Please select the type and path of the target file you will be using as your container for the restored data.
Please select the type of target you wish to open. The target is where you plan to copy messages to and may be a PST file, Content Analysis Store or a live Exchange server.
Select Target
PST File
Connect To Microsoft Exchange Server (Single Mailbox)
Connect To Microsoft Exchange Server (All Mailboxes)
Content Analysis Store
Content Analysis Store Path
Browse...
< Back
Next >
Skip >>
Cancel

Figure 2-5. Select Content Analysis Store in the Target Type & Path Selection

2. Do one of the following:
   - If you know the target CAS file path, enter it in the **Content Analysis Store Path** box.
   - Click **Browse** to open the **Create Content Analysis File** window, and navigate to the desired location. Then create a new CAS file by typing a name in the **File name** box, or select an existing CAS file. Next, click **Open**. The path of the target CAS file appears in the **Content Analysis Store Path** box.
3. Click **Next**.

Data Wizard: Now Processing Data File

The **Now Processing Data File** page of the Data Wizard reports the processing of the EDB file in three stages: *pre-scanning the log files* (integrity check); *scanning the log files* (i.e., playing the log files); and *hashing the EDB file* (building a folder hierarchy).

When the processing is complete, SPGRE automatically proceeds to the next page.

Note: *If SPGRE encounters bad or missing log files during log playing, you will be given the option to continue without playing the logs. If you choose to continue, SPGRE processes the EDB without logs.*

Data Wizard: Completing the Data Wizard

On the last page of the Data Wizard, click **Finish**. This page of the Data Wizard displays the source file results and the target file results.

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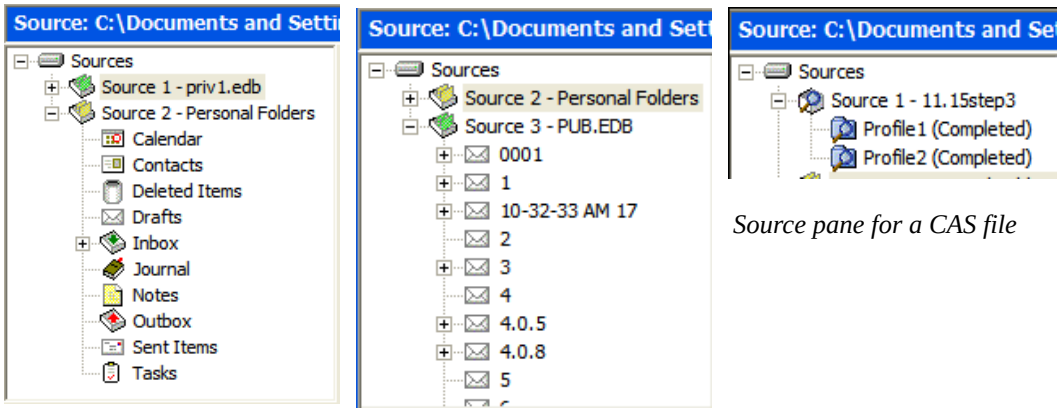
Looking at the Main Window after Using the Data Wizard

In the main window, the source and target panes now contain a source EDB file, PST file, CAS, target PST file, a target Exchange Server, or target CAS.

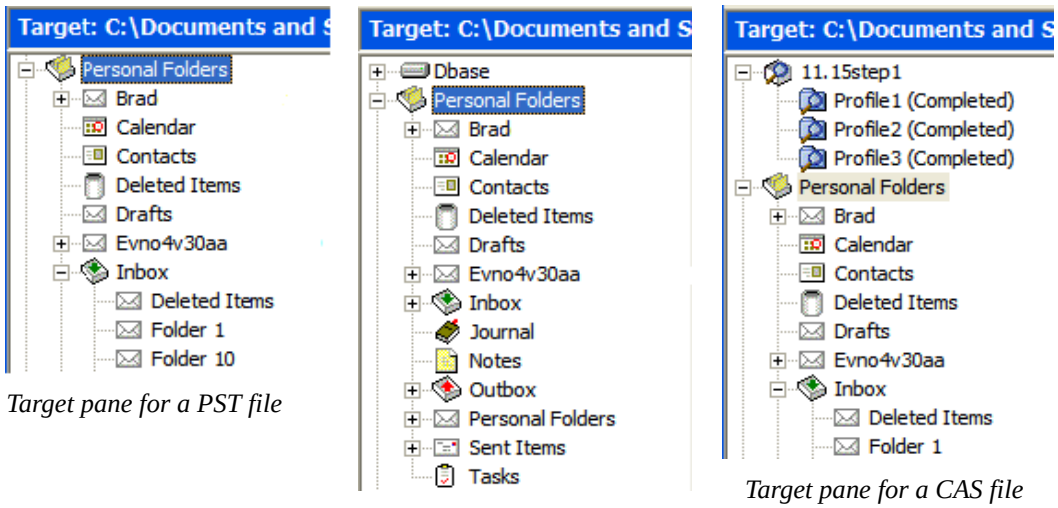


Source pane for a PST file

Source pane for an EDB file

Source pane for a CAS file

Figure 2-6. Source panes with PST, EDB, and CAS files



Target pane for a PST file

Target pane for an Exchange Server

Target pane for a CAS file

Figure 2-7. Target panes for PST files, Exchange Server, and CAS file

Returning to the Data Wizard

When working in the main window, you can return to the Data Wizard at any time.

To open the Data Wizard from the main window

- On the **File** menu, click **Use Wizard**.

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Opening the Source Database and Target Mailboxes from the Main Window

Instead of using the Data Wizard to open the source databases and target mailboxes, you can open them from the main window.

Opening Source and Target Files

The File menu and toolbar can be used to open source or target files in addition to the Data Wizard.

To open a source file

1. Do one of the following:
   - On the **File** menu, click **Open Source**.
   - On the toolbar, click the **Open Source** icon .

   Important: *Before you select a source EDB file in the window below, see "Guidelines for Selecting an Exchange Database" on page 33.*

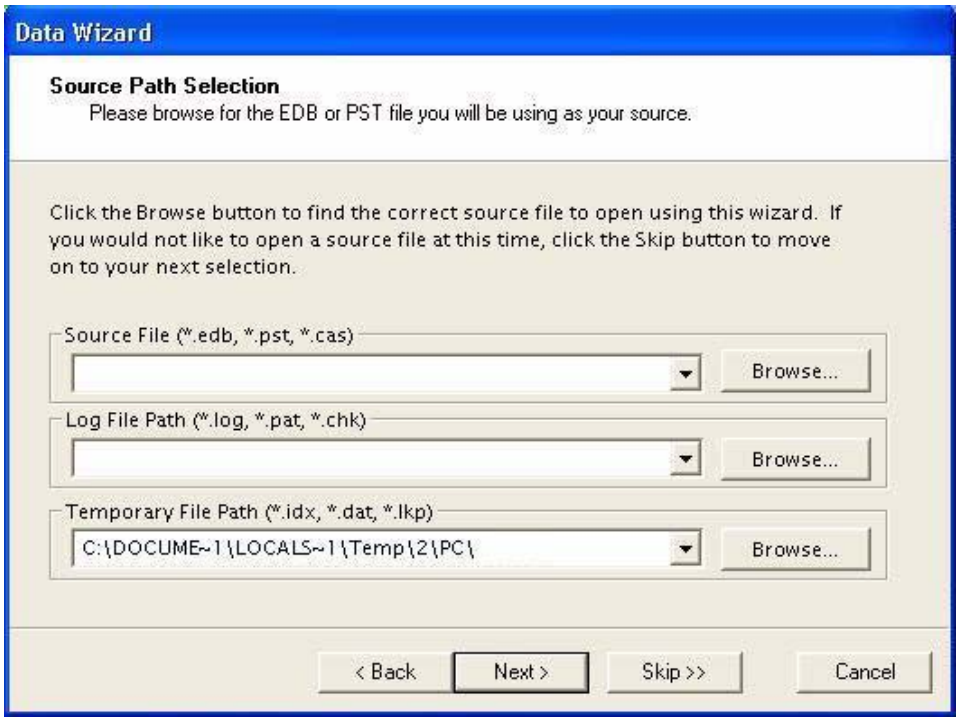
Data Wizard
Source Path Selection
Please browse for the EDB or PST file you will be using as your source.
Click the Browse button to find the correct source file to open using this wizard. If you would not like to open a source file at this time, click the Skip button to move on to your next selection.
Source File (*.edb, *.pst, *.cas)
Browse...
Log File Path (*.log, *.pat, *.chk)
Browse...
Temporary File Path (*.idx, *.dat, *.lkp)
C:\DOCUME~1\LOCALS~1\Temp\2\PC\
Browse...
< Back
Next >
Skip >>
Cancel

Figure 2-8. Browse to a EDB, PST, or CAS file to use as source

2. In the **Source File** box, click **Browse** to find a source EDB, PST, or CAS file. The CAS files are used for the content analysis store feature.
3. If you selected a PST or CAS file, proceed to step 6. PST and CAS files do not require log file or temporary file paths.
4. In the **Log File Path** box, click **Browse** to find the log files associated with the source EDB file.

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Important: *After you select an EDB file, the* ***Log File Path*** *box defaults to the source EDB file path, even if the log files are not in the same directory as the source EDB file. Therefore, make sure you enter the correct log file path in the* ***Log File Path*** *box.*

5. In the **Temporary File Path** box, accept the default location for .idx and .dat files, or specify a new location if they require more hard drive space. For more information, see "Guidelines for Selecting an Exchange Database" on page 33.
6. Click **OK**. The EDB or PST file appears in the SPGRE source pane.

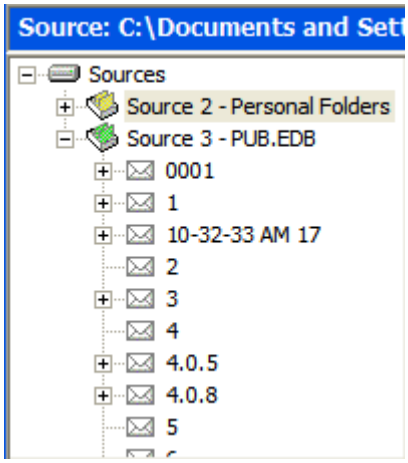

Figure 2-9. Source pane for an EDB file

Tip: *You can use Windows Explorer to open an EDB, PST, or CAS file. In Windows Explorer, double-click the file or drag into the SPGRE source pane.*

To open an existing target PST

1. Do one of the following:
   - On the **File** menu, point to **Open\Create Target**, then **Open Target PST**, and click **Open Existing**.
   - On the toolbar, click the **Open Target PST** icon .
2. In the **Open Existing PST** window, navigate to the desired location, and select an existing PST file.
3. Click **Open**. The PST file appears in the SPGRE target pane.

   Tip: *In Windows Explorer, you can drag a PST file into the SPGRE target pane. Note that double-clicking a PST file does not open it when using Windows XP, Outlook XP, or Outlook 2003.*

To create a new target PST

1. On the **File** menu, point to **Open\Create Target**, then **Open Target PST**, and click **Create New**.
2. In the **Create PST File** window, navigate to the desired location. You may want to create a new folder.
3. In the **File name** box, type a name for the new PST file.
4. Click **New**. The PST file appears in the SPGRE target pane.

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Note: *With Outlook 2003, you have to choose between the 97 and 2003 version of the PST.*

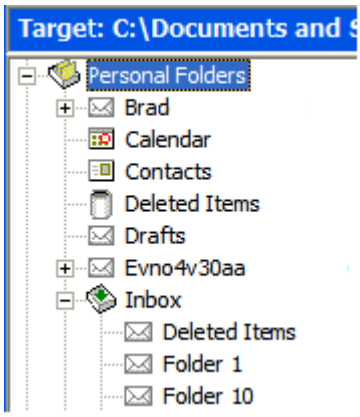

Figure 2-10. Target pane for a PST file

To open a target Exchange Server

1. Do one of the following:
   - On the **File** menu, point to **Open\Create Target**, then click **Open Target Exchange Server**.
   - On the toolbar, click the **Open Target Exchange Server** icon . The **Connect to Exchange Server** window appears.

Figure 2-11. Enter the Mailbox Name and Server Name to connect to the Exchange Server

2. For the **Mailbox and Server Name** boxes, type the mailbox and server names.

   Tip: *If you do not know the full name of the mailbox, type the first letter of the mailbox in the* ***Mailbox Name*** *box, and click* ***OK****. (Log on to the Exchange Server if prompted; see step 4.) In the* ***Check Name*** *window that appears, select the mailbox from the list, and click* ***OK****.*

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3. The **Connect to Public Folders** check box is selected by default. This feature allows you to open public folders as a target for restoring public folders or messages. If you do not want to restore to public folders, clear this check box. For more information, see "Restoring to Public Folders" on page 97.
4. If you are not authenticated to the domain, the **Enter Password** window appears. In this window, type a user name that has full rights to the mailbox, a password, and a domain name. Then click **OK**. This window may appear again, which requires you to reenter this information.
5. Click **OK**. The Exchange Server appears in the SPGRE target pane.

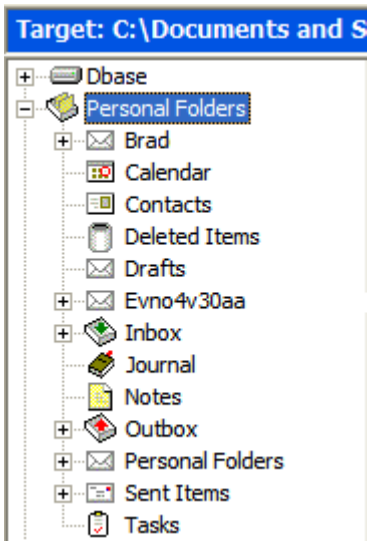

Figure 2-12. Target pane for an Exchange Server

To open a target content analysis store

1. Do one of the following:
   - On the **File** menu, point to **Open\Create Target**, then click **Open Target Content Analysis Store**.
   - On the toolbar, click the **Open Target Content Analysis Store** icon . The **Opening a Content Analysis File** window appears.
2. In the **Opening a Content Analysis File** window, navigate to desired location and select an existing CAS file.
3. Click **Open**. The CAS file appears in the SPGRE target pane.

Opening a Live Microsoft® Exchange Server as a Target

You can open live Exchange Servers as a target within SPGRE. This means you can connect to one live Exchange Server at a time, establishing a single mailbox connection or connecting to all accessible mailboxes and displaying a list of the mailboxes found in that Exchange Server. A status indicator tells you if you have permission rights to view a mailbox.

Note: *The Exchange Server as a target feature is only supported if the system running SPGRE is on the same domain as the Exchange Server.*

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Recommendation: If connecting to an Exchange 2010 CAS Array, use the fully qualified domain name of the CAS Array for the Server Name (for example, `casarray.domain.name`).

MAILBOX ACCESS

When connecting to a single mailbox, the target pane populates with only the specified single mailbox. When connecting to all mailboxes on an Exchange Server, the target pane populates with the list of mailboxes found in that Exchange Server.

Note: *You can connect to only one live Exchange Server at a time. If you attempt to connect to an additional live Exchange Server while a server is already open, the current server connection closes.*

PREFERENCE SETTING

When SPGRE connects to an Exchange Server, it can display both accessible and inaccessible mailboxes. You can set the preferences so that all mailboxes are displayed regardless of their permission status or only those mailboxes that you are permitted to view. See “Setting Preferences” on page 26 for more information.

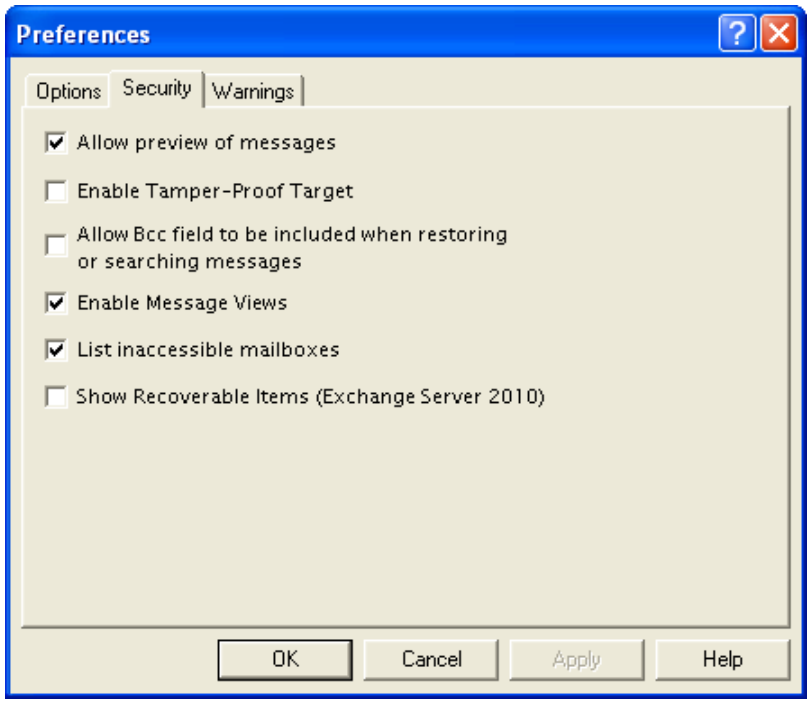

Figure 2-13. List inaccessible mailboxes preference

Note: *Clearing this option while you have mailboxes open prompts the mailbox list to refresh and redisplay without the inaccessible mailboxes showing.*

MAILBOX FUNCTIONS

Paste, Paste Special, folder creation, folder renaming, and the search functions are available for the accessible mailboxes. A mailbox or server cannot be renamed.

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To open a single mailbox in a live Exchange Server as a target

1. Do one of the following to display the **Connect To Exchange Server** window:
   - On the **File** menu, click **Open\Create Target**, then click **Open Target Exchange Server**.
   - On the toolbar, click the **Open Target Exchange Server** icon .

Figure 2-14. Connect To Exchange Server

2. Under **Connect options**, click **Connect to a single mailbox**.
3. Enter **Exchange Information**:
   - **Mailbox Name:** The mailbox name must match exactly what is in the Exchange Server.
   - **Server Name:** The Server Name must match the existing Exchange Server.
4. Select **Connect To Public Folders** if desired.
5. Click **OK**. The **Opening Target** process begins. This may take several minutes.
6. The **Opening Target** progress report can be printed or saved if desired. Otherwise, click **Close** to close the progress window and display the opened mailboxes in the target pane.

To open mailbox(es) in a live Exchange Server using the Data Wizard

1. Open the Data Wizard by doing one of the following:
   - On the **File** menu, click **Use Wizard**.
   - Press **Ctrl+W**.
2. Click **Next** and then **Skip** to reach the **Target Type & Path Selection** page.

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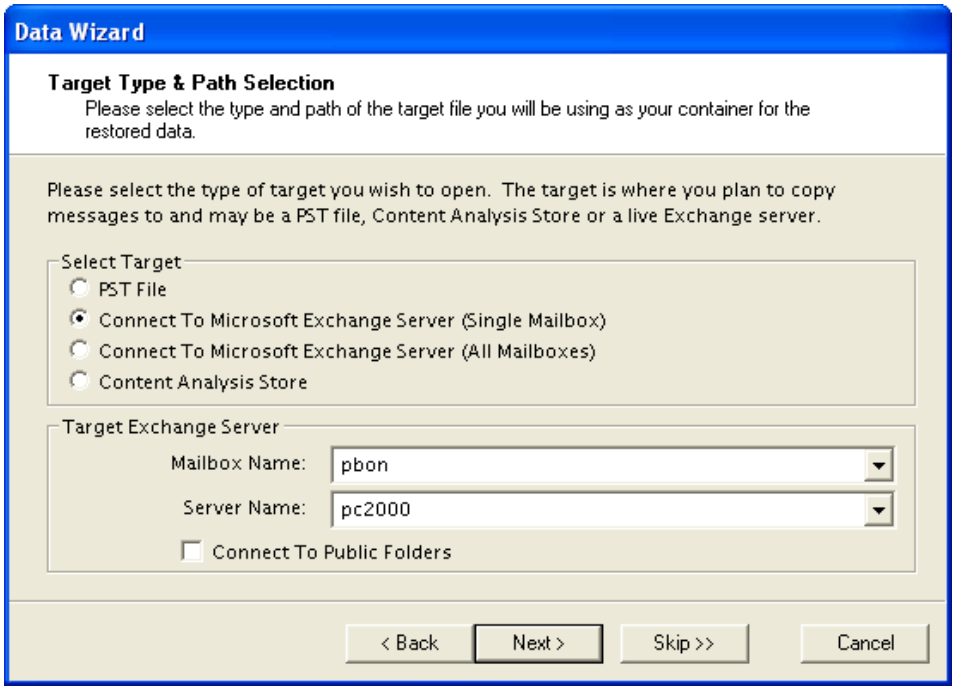
Data Wizard
Target Type & Path Selection
Please select the type and path of the target file you will be using as your container for the restored data.
Please select the type of target you wish to open. The target is where you plan to copy messages to and may be a PST file, Content Analysis Store or a live Exchange server.
Select Target
PST File
Connect To Microsoft Exchange Server (Single Mailbox)
Connect To Microsoft Exchange Server (All Mailboxes)
Content Analysis Store
Target Exchange Server
Mailbox Name:
pbon
Server Name:
pc2000
Connect To Public Folders
< Back
Next >
Skip >>
Cancel

Figure 2-15. Connect To Exchange Server using the Data Wizard

3. Select **Connect To Exchange Server (Single Mailbox)** or **Connect To Exchange Server (All Mailboxes)**.
4. Do one of the following:
   - For **Single Mailbox**, using the drop-down arrows, select the correct **Mailbox Name** and **Server Name**.
   - For **All Mailboxes**, using the drop-down arrows, select the **Domain Controller** and **Server Name**.
5. Select or clear **Connect To Public Folders** as desired.
6. Click **Next**. The **Opening Target** progress window is displayed. If Microsoft Office Outlook does not recognize the Mailbox Name, a **Check Name** window appears.

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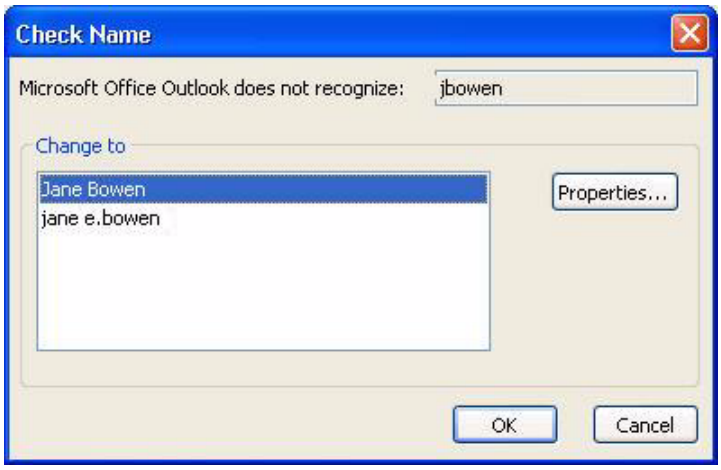

Figure 2-16. Check Name

7. Select a new Mailbox Name from the **Change to** list and click **OK**. The connection completes and the **Completing the Data Wizard** page appears.
8. Click **Finish**.

To open multiple mailboxes in a live Exchange Server as a target

1. Do one of the following to display the **Connect To Exchange Server** window:
   - On the **File** menu, click **Open\Create Target**, and then click **Open Target Exchange Server**.
   - On the toolbar, click the **Open Target Exchange Server** icon .
2. Under **Connect options**, click **Connect to all mailboxes on server.**
3. Enter **Exchange Information**:
   - **Domain Controller:** The domain controller is needed to retrieve the list of mailboxes from Active Directory. It must match the existing Exchange Server.
   - **Server Name:** The Server Name must match the existing Exchange Server.
4. Select **Connect To Public Folders** if desired.
5. Click **OK**. If the server is already open, a message appears asking you if you want to close the current server and continue.

Exchange server already open
A current Exchange Server is already open. Only one Exchange Server can be open at a time. Continue and close the current server?
Do not show this message again
OK
Cancel

Figure 2-17. Exchange Server already open message

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Tip: *If you do not want this message to display every time you already have an Exchange Server open, select* ***Do not show this message again****. Selecting this option clears the Show warning setting in* ***Preferences - Warnings*** *tab.*

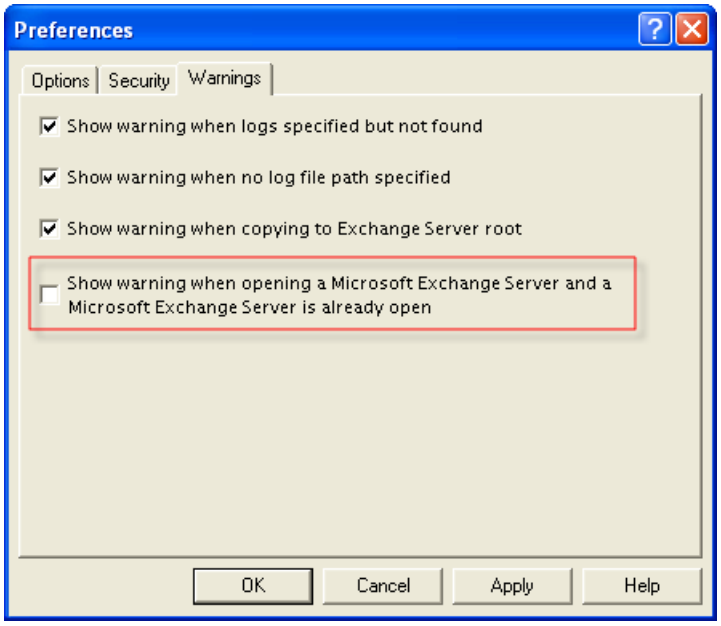
Preferences
Options
Security
Warnings
Show warning when logs specified but not found
Show warning when no log file path specified
Show warning when copying to Exchange Server root
Show warning when opening a Microsoft Exchange Server and a Microsoft Exchange Server is already open
OK
Cancel
Apply
Help

Figure 2-18. Cleared warning message

Clicking **OK** in the **Exchange Server already open** message begins the **Opening Target** process. This may take several minutes.

6. To stop the opening process from completing, click **Cancel**. A cancel confirmation message appears. Until you click **Yes** or **No**, the opening process continues in the background.

   Note: *If you click* ***Yes*** *to confirm the cancel operation, all mailboxes opened up to this point appear in the target pane after the progress window is closed.*

7. The **Opening Target** progress report can be printed or saved if desired. Otherwise, click **Close** to close the progress window and display the opened mailboxes in the target pane.

Opening Multiple Sources and Targets

You can display multiple sources in the source pane and multiple targets in the target pane. sources include EDB, PST, and CAS files. Targets include PSTs, CAS, and Exchange Servers. See the instructions for using the Data Wizard or the main window to open one source or one target at a time.0

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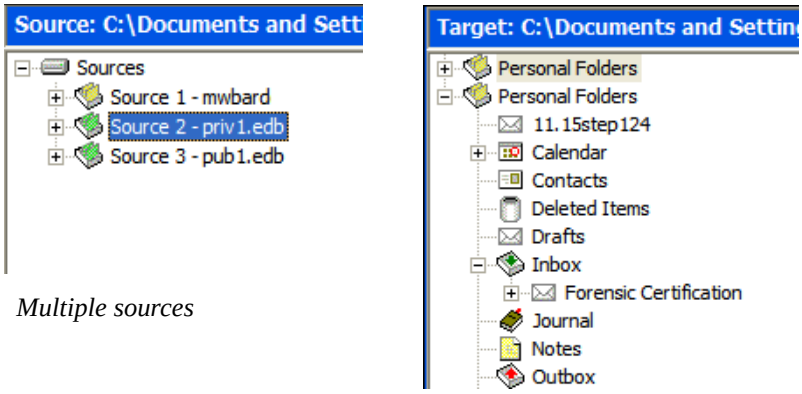

Multiple sources

Multiple targets

Figure 2-19. Multiple sources can be displayed

Closing Sources and Targets

You can close sources and targets from the main window.

To close a source

1. In the source pane, select a source EDB, PST, or CAS file.
2. Do one of the following:
   - On the **File** menu, click **Close Store**.
   - Right-click the selection, and on the context menu click **Close Store**.

To close all sources

1. In the source pane, right-click the **sources** root node.
2. On the context menu, click **Close All Stores**.

To close a target

1. In the target pane, select a PST file, Exchange database, or CAS file.
2. Do one of the following:
   - On the **File** menu, click **Close Store**.
   - Right-click the selection, and on the context menu click **Close Store**.

Deleting Items in the Target Pane

Using the Delete key to remove an item (for example, folder, message) from the SPGRE target pane permanently deletes the item, similar to using Shift+Delete in Microsoft Outlook.

Note: *Messages within a content analysis store profile folder cannot be deleted.*

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Using the Mailbox Creation Wizard

You can create new mailboxes either by using a wizard or the Copy and Paste functions. Possible uses for this new function are migrating user accounts from Exchange Server 2000 or 2003 to an Exchange Server 2007 or Exchange Server 2010 target or archiving legacy data.

User Permission

You must have the necessary Active Directory permissions to create a mailbox on the selected Exchange Server. Both the user account logons and the Name field must be unique to create a new user account and mailbox. If you are creating a mailbox for an existing user, the Name field must match the full name of the existing user.

Tip: *It is recommended that anyone creating mailbox-enabled users have fundamental knowledge of Exchange administration and Active Directory.*

Creating Mailboxes

You can create mailboxes with the wizard manually or by copying a single mailbox or the root of a source EDB onto the root of a target Exchange Server.

Note: *Mailbox creation on disabled user accounts is not supported.*

Note: *The target Exchange Server must be in the same domain as the SPGRE computer.*

CREATING MAILBOXES USING THE WIZARD

You can create a new mailbox by using the wizard which steps you through the process.

To create an Exchange Server 2000/2003 mailbox using the wizard

1. Open a target Exchange Server in SPGRE.
2. Right-click the target Exchange Server root and click **New Mailbox**, or on the **Edit** menu, click **New Mailbox**. The **New Mailbox** form appears.

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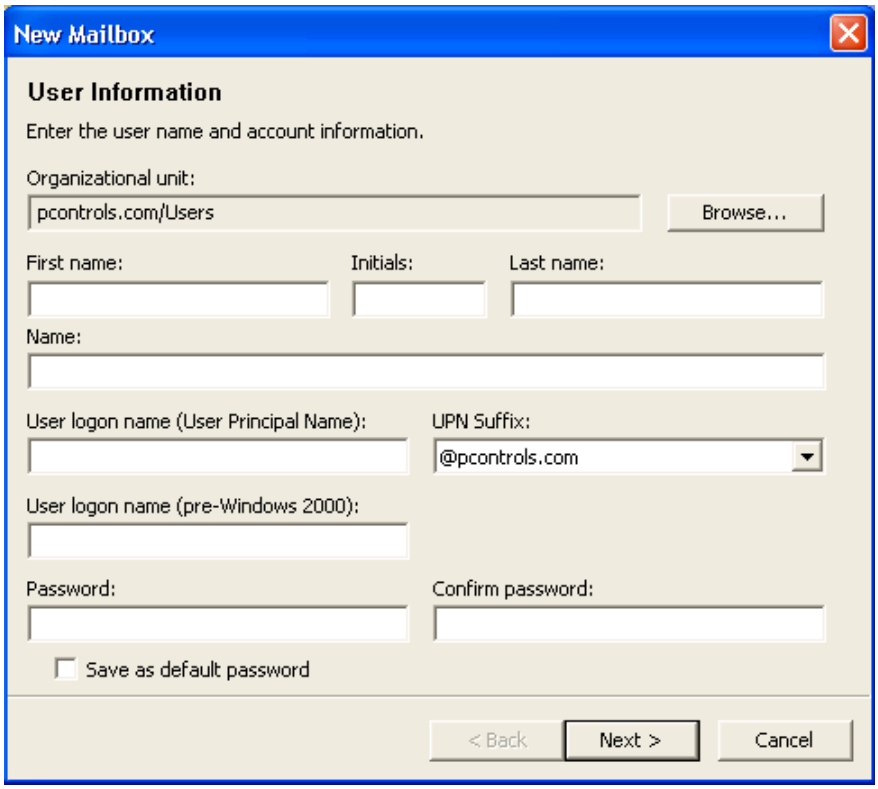

Figure 2-20. New Mailbox form for Exchange Server 2000 and 2003

3. Enter the **User Information**:
   - **Organizational unit:** This field is pre-populated but you can change it by clicking Browse.
   - **First name: (Optional)** Enter the first name of the user. If a user account already exists without a mailbox based on this Name, the mailbox is created on the existing user account.
   - **Initials: (Optional)** Enter the initials of the user.
   - **Last name: (Optional)** Enter the last name of the user. If a user account already exists without a mailbox based on this Name, the mailbox is created on the existing user account.
   - **Name:** This field auto-populates as the First name, Initials, and Last name are entered. This field can also be modified.
   - **User logon name (User Principal Name):** Create a user logon name for the new account. If this name matches the same field of an existing user account, an error is displayed indicating that it is a duplicate.
   - **UPN suffix:** This field adds the Organizational Unit selected as the second half of the logon name email address.
   - **User logon name (pre-Windows 2000):** A user logon name for older versions of Windows.
   - **Password and Confirm Password: (Optional)** The password must meet the domain's minimum password requirements.

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- **Save as default password:** Select this check box to designate the entered password as the default.

4. Click **Next** to display the **Mailbox Settings** window.

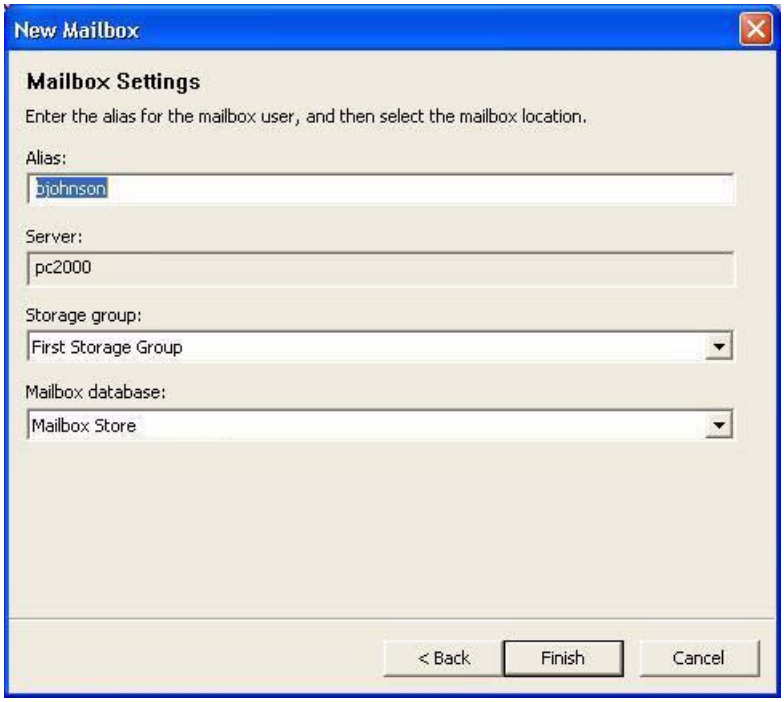

Figure 2-21. Mailbox Settings window for Exchange Server 2000 and 2003

5. Ensure the **Storage group** and **Mailbox database** settings are correct. The **Alias** and **Server** fields are auto-populated, however, **Alias** can be edited if necessary.
6. Click **Finish**.
7. If the mailbox creates successfully or unsuccessfully, a message displays. Click **OK**. If it was created successfully, the new mailbox automatically appears in the target directory and is expanded.

To create an Exchange Server 2007 mailbox using the wizard

1. Open a target Exchange Server in SPGRE.
2. Right-click the target Exchange Server 2007 root and click **New Mailbox**, or on the **Edit** menu, click **New Mailbox**. The **New Mailbox** form appears.

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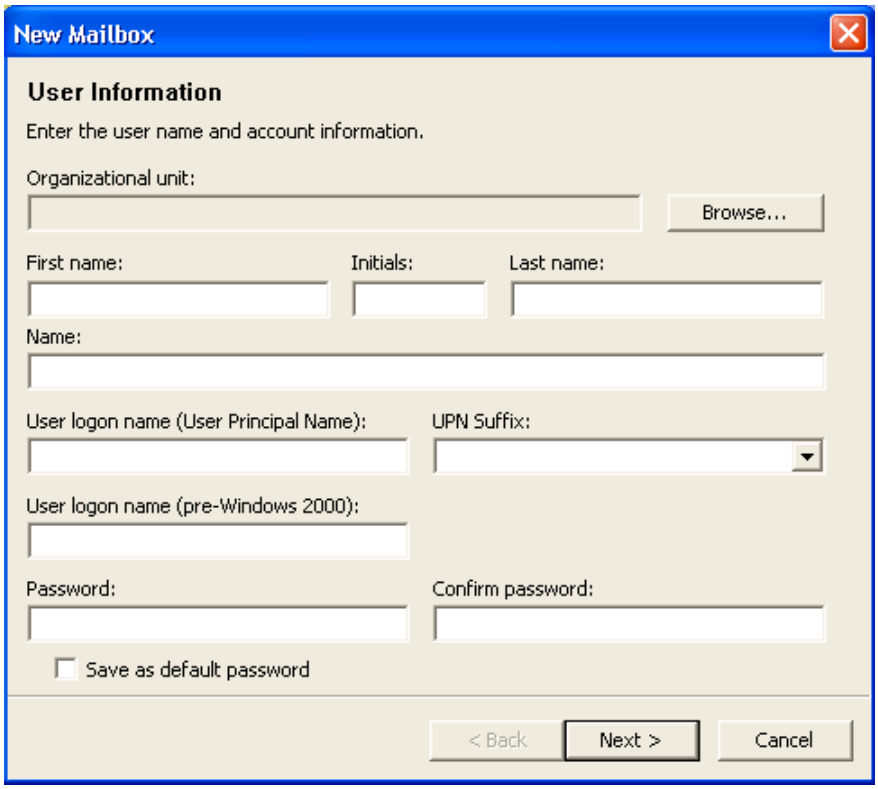

Figure 2-22. New Mailbox form for Exchange Server 2000, 2003, and 2007

3. Enter the **User Information**:
   - **Organizational unit:** This field is pre-populated but you can change it by clicking Browse.
   - **First name: (Optional)** Enter the first name of the user. If a user account already exists without a mailbox based on this Name, the mailbox is created on the existing user account.
   - **Initials: (Optional)** Enter the initials of the user.
   - **Last name: (Optional)** Enter the last name of the user. If a user account already exists without a mailbox based on this Name, the mailbox is created on the existing user account.
   - **Name:** This field auto-populates as the First name, Initials, and Last name are entered. This field can also be modified.
   - **User logon name (User Principal Name):** Create a user logon name for the new account. If this name matches the same field of an existing user account, an error is displayed indicating that it is a duplicate.
   - **UPN suffix:** This field adds the Organizational Unit selected as the second half of the logon name email address.
   - **User logon name (pre-Windows 2000):** A user logon name for older versions of Windows.
   - **Password and Confirm Password: (Optional)** The password must meet the domain's minimum password requirements.

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- **Save as default password:** Select this check box to designate the entered password as the default.

4. Click **Next** to display the **Mailbox Settings** window.

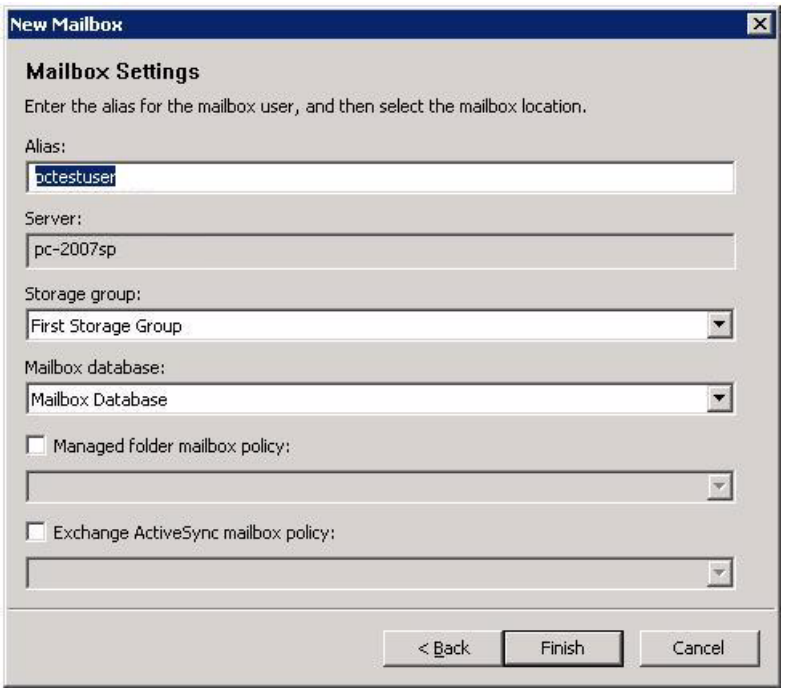

Figure 2-23. Mailbox Settings for multiple mailboxes - Exchange Server 2007

5. Enter the **Mailbox Settings**:
   - Enter the **Alias** for the mailbox user. The alias will be derived from each source mailbox.
   - The **Server** field is auto-populated. Ensure the **Storage group** and **Mailbox database** settings are correct.
   - **Mailbox database:** The mailbox database will be automatically selected by the Exchange Server if not specified. To specify the mailbox database, select the check box which enables the drop-down list of all available mailbox databases.
   - **Managed folder mailbox policy:** To apply a managed folder policy to your mailbox, select the check box which enables the drop-down list of all available managed folder mailbox policies in the organization.
   - **Exchange ActiveSync mailbox policy:** To apply an ActiveSync mailbox policy to your mailbox, select the check box which enables the drop-down list of all available ActiveSync mailbox policies in the organization.
6. Click **Next**. The mailbox information is validated and the mailbox is created.

Note: *If the Managed folder mailbox policy check box is selected, a warning appears stating: "When assigning a managed folder mailbox policy with managed custom folders to a mailbox, Outlook clients older than Outlook 2007 do not have all available client features and clients older than Outlook 2003 SP2 are not supported. Are you sure you want to assign a managed folder mailbox policy to this mailbox?"*

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To create an Exchange Server 2010 mailbox using the wizard

1. Open a target Exchange Server in SPGRE.
2. Right-click the target Exchange Server 2010 root and click **New Mailbox**, or on the **Edit** menu, click **New Mailbox**. The **New Mailbox** form appears.

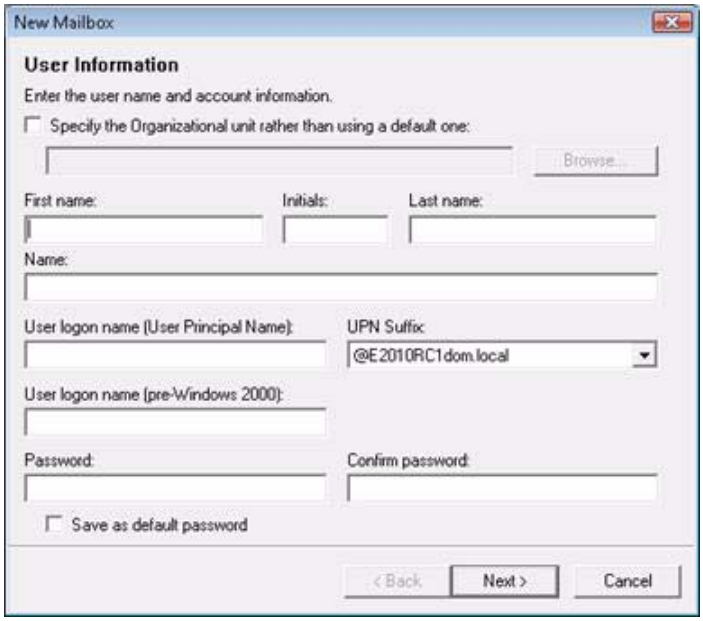

Figure 2-24. New Mailbox form for Exchange Server 2010

3. Enter the **User Information**:
   - **Organizational unit:** The Organizational Unit will be automatically selected by the Exchange Server if not specified. You can change it by selecting the **Specify the Organizational unit rather than using a default one** check box. Select this check box to enable the **Browse** button where you can select a different Organizational unit.
   - **First name: (Optional)** Enter the first name of the user. If a user account already exists without a mailbox based on this Name, the mailbox is created on the existing user account.
   - **Initials: (Optional)** Enter the initials of the user.
   - **Last name: (Optional)** Enter the last name of the user. If a user account already exists without a mailbox based on this Name, the mailbox is created on the existing user account.
   - **Name:** This field auto-populates as the First name, Initials, and Last name are entered. This field can also be modified.
   - **User logon name (User Principal Name):** Create a user logon name for the new account. If this name matches the same field of an existing user account, an error is displayed indicating that it is a duplicate.
   - **UPN suffix:** This field adds the Organizational Unit selected as the second half of the logon name email address.
   - **User logon name (pre-Windows 2000):** A user logon name for older versions of Windows.

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- **Password and Confirm Password: (Optional)** The password must meet the domain's minimum password requirements.
- **Save as default password:** Select this check box to designate the entered password as the default.

4. Click **Next** to display the **Mailbox Settings** window.

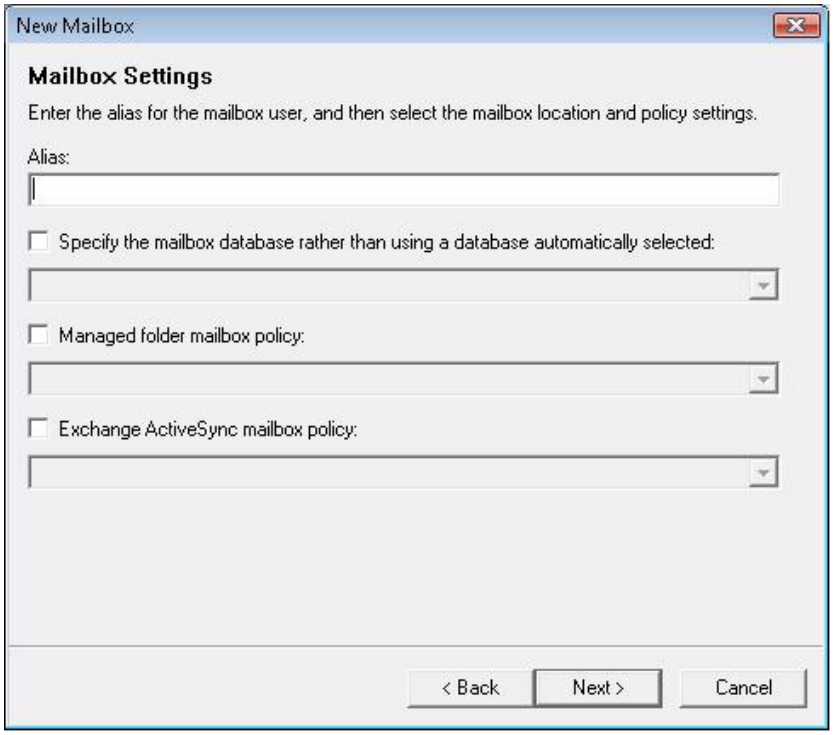
New Mailbox
Mailbox Settings
Enter the alias for the mailbox user, and then select the mailbox location and policy settings.
Alias:
Specify the mailbox database rather than using a database automatically selected:
Managed folder mailbox policy:
Exchange ActiveSync mailbox policy:
< Back
Next >
Cancel

Figure 2-25. Mailbox Settings window for Exchange Server 2010

5. Enter the **Mailbox Settings**:
   - Enter the **Alias** for the mailbox user.
   - **Mailbox database:** The mailbox database will be automatically selected by the Exchange Server if not specified. To specify the mailbox database, select the check box which enables the drop-down list of all available mailbox databases.
   - **Managed folder mailbox policy:** To apply a managed folder policy to your mailbox, select the check box which enables the drop-down list of all available managed folder mailbox policies in the organization.
   - **Exchange ActiveSync mailbox policy:** To apply an ActiveSync mailbox policy to your mailbox, select the check box which enables the drop-down list of all available ActiveSync mailbox policies in the organization.
6. Click **Next**. The mailbox information is validated. The **Archive Settings** page appears.

Note: *If the Managed folder mailbox policy check box is selected, a warning appears stating: "When assigning a managed folder mailbox policy with managed custom folders to a mailbox, Outlook clients older than Outlook 2007 do not have all available client features and clients older than Outlook 2003 SP2 are not supported. Are you sure you want to assign a managed folder mailbox policy to this mailbox?"*

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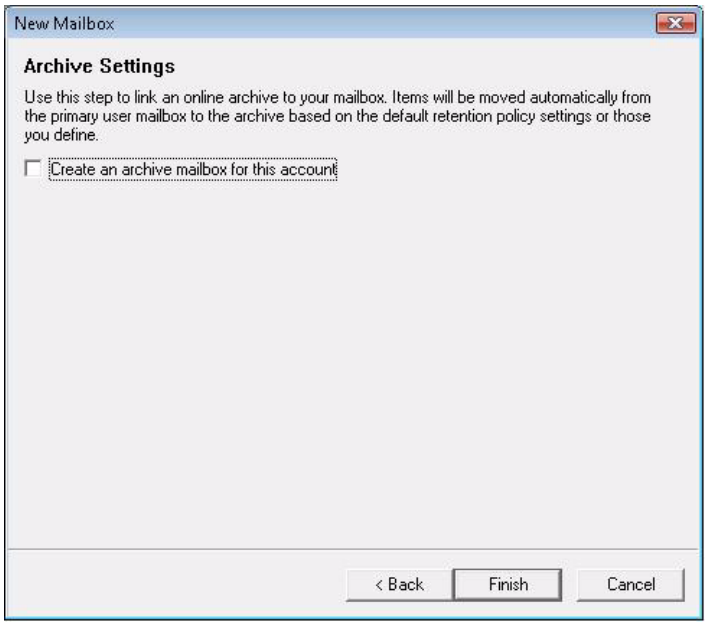
New Mailbox
Archive Settings
Use this step to link an online archive to your mailbox. Items will be moved automatically from the primary user mailbox to the archive based on the default retention policy settings or those you define.
Create an archive mailbox for this account
< Back
Finish
Cancel

Figure 2-26. Archive Settings for Exchange Server 2010

7. Select the **Create an archive mailbox for this account** to associate an online archive mailbox with the user account.

Note:

- *If your Preferences are set to display inaccessible mailboxes, they are displayed in the target directory but are inaccessible.*
- *If the mailbox was created successfully but it cannot be connected to, the new mailbox is displayed in the target directory as inaccessible.*
- *If the mailbox creation fails, the mailbox does not appear in the target directory.*

CREATING MAILBOXES USING COPY-PASTE

You can create new mailboxes by using the Copy function. Mailbox creation through copying can be made available or unavailable through the Preferences window under the Options tab.

To create a new Exchange Server 2000/2003/2007/2010 single mailbox using copy-paste

1. Verify that **Allow mailbox creation during copy** option in **Preferences** is selected.
2. Right-click the single mailbox in the source pane and click **Copy**.
3. Highlight the target Exchange Server and click **Paste**. The **New Mailbox** window opens with certain fields auto-populated.

   Note: *If **Paste** is not available, you do not have access rights to the source mailbox.*

4. Confirm the **User Information** settings are correct and click **Next**.
5. Confirm **Mailbox Settings** are correct and click **Finish**. The **Copy Progress** window displays and creates a report when the copying is finished.

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6. Click **Print** to print the report, **Save** to save the report to your hard drive, or **Close** to close the Copy Progress window. Each mailbox from the source EDB you copied is now a new mailbox in the target pane.

   Note:

   - *If the mailbox already exists and is accessible, it is added to the target directory and shown as accessible.*
   - *If the source mailbox did not exist in the target directory, a new mailbox is created on either a new user account or an existing user account.*
   - *If the mailbox you just created is not accessible, it displays in the target directory and shown as inaccessible.*

To create multiple Exchange Server 2000 and 2003 mailboxes using copy-paste

1. Verify that **Allow mailbox creation during copy** and **Prompt whether to create mailboxes during copy** options in **Preferences** are selected.
2. Right-click the entire source EDB and click **Copy**.
3. Highlight the target Exchange Server and click **Paste**. A confirmation message appears.
4. Clicking **Yes** opens the mailbox creation wizard.
5. Confirm the **User Information** settings are correct. You can specify the Organizational Unit, UPN Suffix, and Password. The other fields will be derived from each source mailbox.
6. Click **Next**.

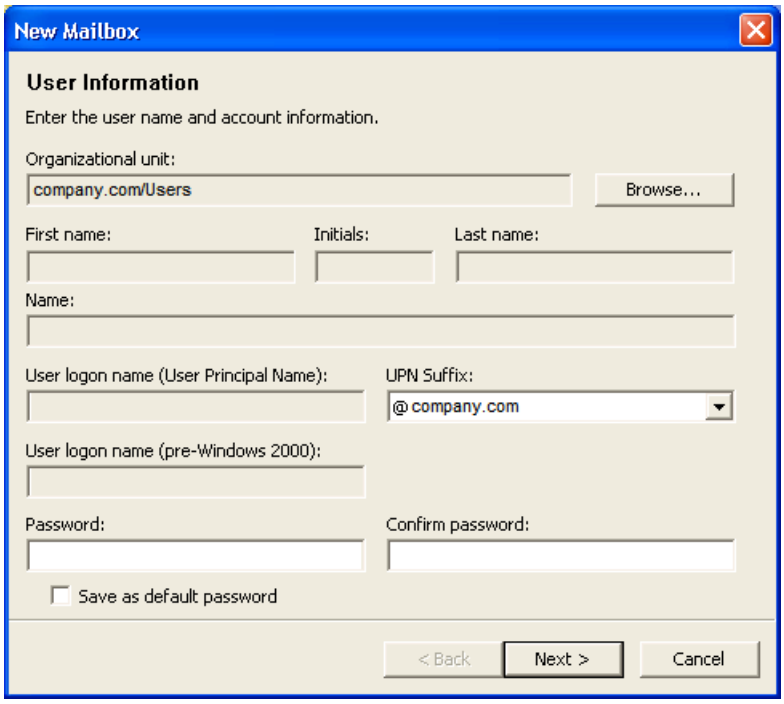

Figure 2-27. User Information window for multiple mailboxes

7. Confirm that the **Mailbox Settings** are correct. The **Alias** will be derived from each source mailbox.

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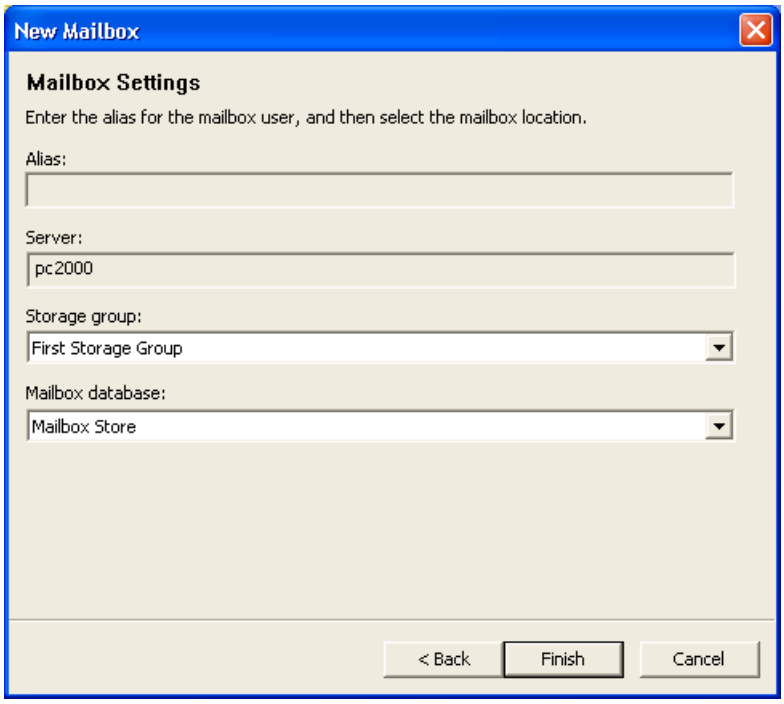

Figure 2-28. Mailbox Settings for multiple mailboxes

8. Click **Finish**. The **Copy Progress** window appears and creates a report when the copying is finished.
9. Click **Print** to print the report, **Save** to save the report to your hard drive, or **Close** to close the Copy Progress window.

   The EDB source you copied is now a new mailbox in the target pane.

To create multiple Exchange Server 2007 mailboxes using copy-paste

1. Verify that **Allow mailbox creation during copy** and **Prompt whether to create mailboxes during copy** options in **Preferences** are selected.
2. Right-click the entire source EDB and click **Copy**.
3. Highlight the target Exchange Server and click **Paste**. A confirmation message appears.

Mailbox Creation
Do you want mailboxes to be created for mailboxes that do not exist?
Do not show this message again
Yes
No
Cancel

Figure 2-29. Mailbox Creation confirmation message

4. Clicking **Yes** opens the mailbox creation wizard.

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5. Confirm the **User Information** settings are correct. You can specify the Organizational Unit, UPN Suffix, and Password. The other fields will be derived from each source mailbox.

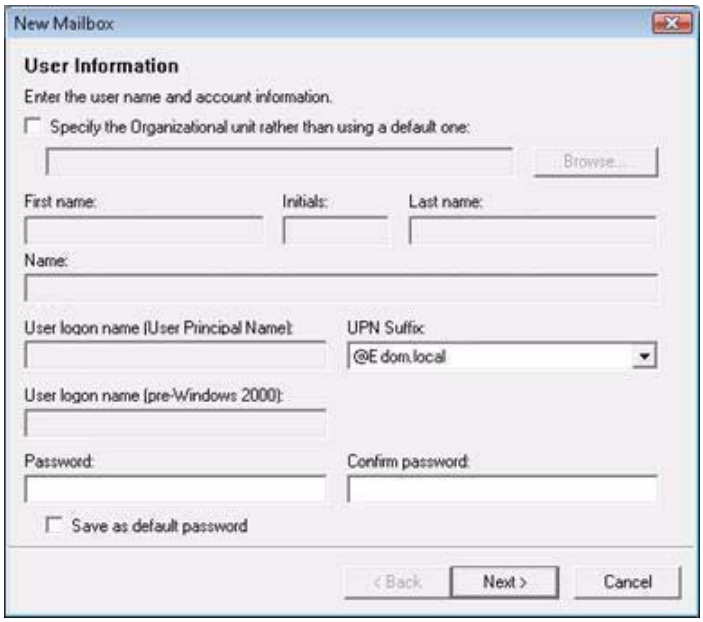

Figure 2-30. User Information window for multiple mailboxes

6. Click **Next**. The **Mailbox Settings** window appears.
7. Enter the **Mailbox Settings**:
   - Enter the **Alias** for the mailbox user. The alias will be derived from each source mailbox.
   - The **Server** field is auto-populated. Ensure the **Storage group** and **Mailbox database** settings are correct.
   - M**ailbox database:** The mailbox database will be automatically selected by the Exchange Server if not specified. To specify the mailbox database, select the check box which enables the drop-down list of all available mailbox databases.
   - **Managed folder mailbox policy:** To apply a managed folder policy to your mailbox, select the check box which enables the drop-down list of all available managed folder mailbox policies in the organization.
   - **Exchange ActiveSync mailbox policy:** To apply an ActiveSync mailbox policy to your mailbox, select the check box which enables the drop-down list of all available ActiveSync mailbox policies in the organization.

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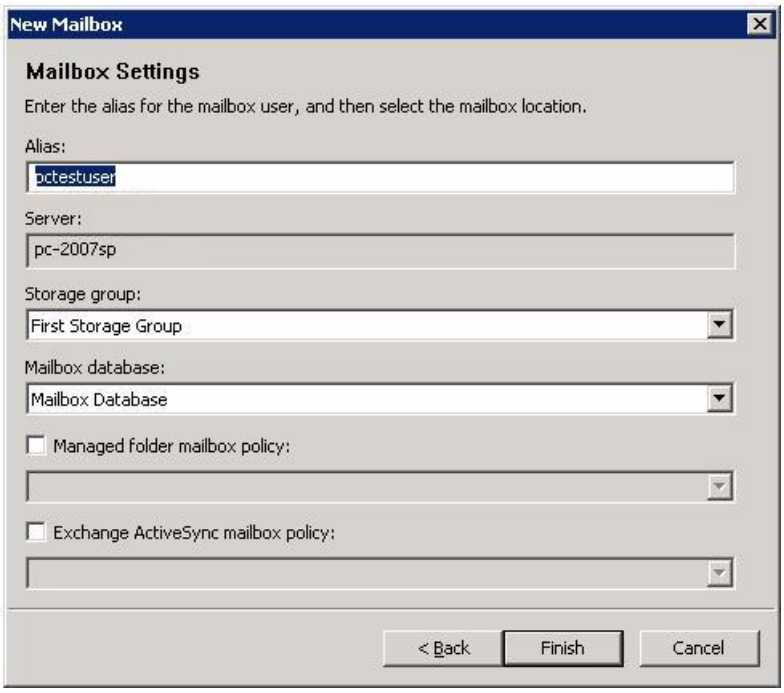

Figure 2-31. Mailbox Settings for multiple mailboxes - Exchange Server 2007

8. Click **Next**. The mailbox information is validated and a new mailbox is created.

   Note: *If the Managed folder mailbox policy check box is selected, a warning appears stating: "When assigning a managed folder mailbox policy with managed custom folders to a mailbox, Outlook clients older than Outlook 2007 do not have all available client features and clients older than Outlook 2003 SP2 are not supported. Are you sure you want to assign a managed folder mailbox policy to this mailbox?"*

9. Click **Finish**. The **Copy Progress** window appears and creates a report when the copying is finished.
10. Click **Print** to print the report, **Save** to save the report to your hard drive, or **Close** to close the Copy Progress window.

    The EDB source you copied is now a new mailbox in the target pane.

To create multiple Exchange Server 2010 mailboxes using copy-paste

1. Verify that **Allow mailbox creation during copy** and **Prompt whether to create mailboxes during copy** options in **Preferences** are selected.
2. Right-click the entire source EDB and click **Copy**.
3. Highlight the target Exchange Server and click **Paste**. A confirmation message appears.
4. Clicking **Yes** opens the mailbox creation wizard.
5. Confirm the **User Information** settings are correct. You can specify the Organizational Unit, UPN Suffix, and Password. The other fields will be derived from each source mailbox.

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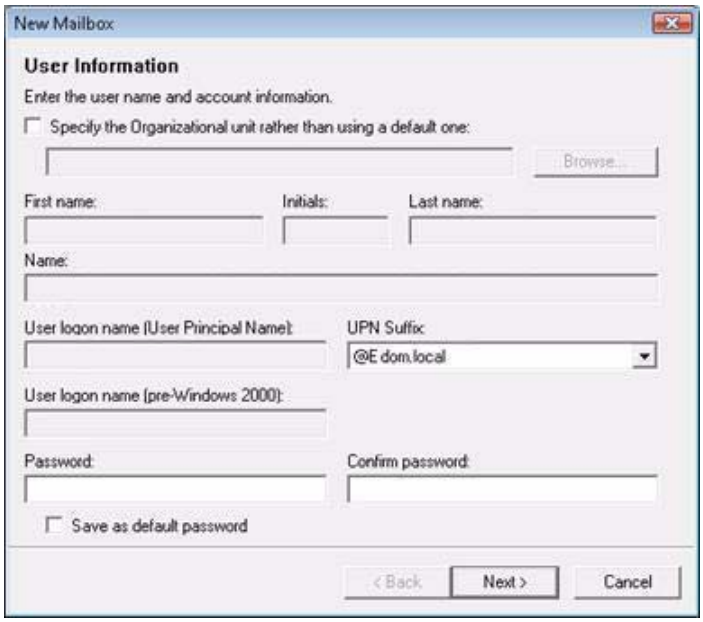

Figure 2-32. User Information window for multiple mailboxes

6. Click **Next**. The **Mailbox Settings** window appears.
7. Enter the **Mailbox Settings**:
   - Enter the **Alias** for the mailbox user. The alias will be derived from each source mailbox.
   - M**ailbox database:** The mailbox database will be automatically selected by the Exchange Server if not specified. To specify the mailbox database, select the check box which enables the drop-down list of all available mailbox databases.
   - **Managed folder mailbox policy:** To apply a managed folder policy to your mailbox, select the check box which enables the drop-down list of all available managed folder mailbox policies in the organization.
   - **Exchange ActiveSync mailbox policy:** To apply an ActiveSync mailbox policy to your mailbox, select the check box which enables the drop-down list of all available ActiveSync mailbox policies in the organization.

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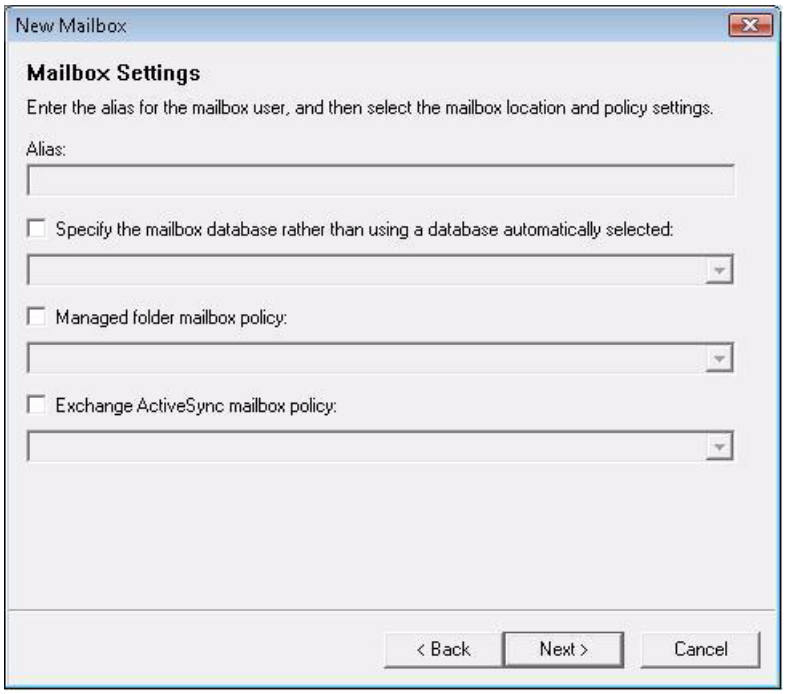
New Mailbox
Mailbox Settings
Enter the alias for the mailbox user, and then select the mailbox location and policy settings.
Alias:
Specify the mailbox database rather than using a database automatically selected:
Managed folder mailbox policy:
Exchange ActiveSync mailbox policy:
< Back
Next >
Cancel

Figure 2-33. Mailbox Settings for multiple mailboxes - Exchange Server 2010

8. Click **Next**. The mailbox information is validated. The **Archive Settings** page appears.

   Note: *If the Managed folder mailbox policy check box is selected, a warning appears stating: "When assigning a managed folder mailbox policy with managed custom folders to a mailbox, Outlook clients older than Outlook 2007 do not have all available client features and clients older than Outlook 2003 SP2 are not supported. Are you sure you want to assign a managed folder mailbox policy to this mailbox?"*

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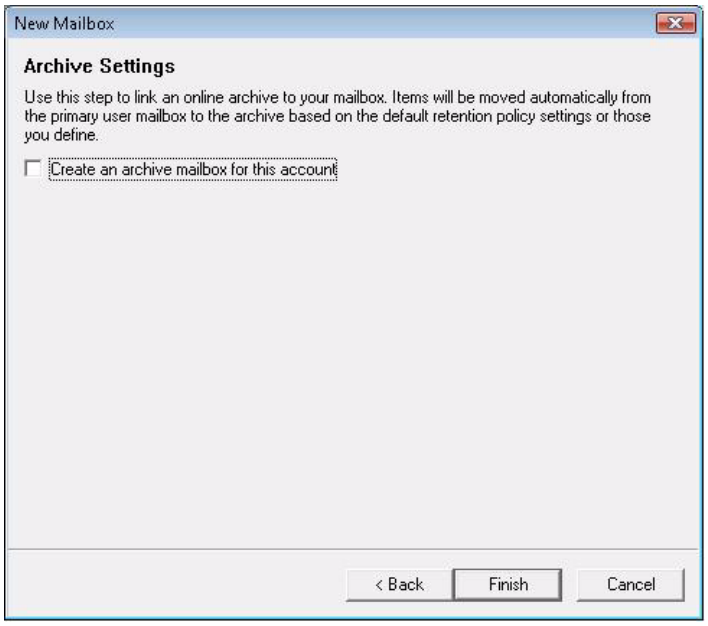
New Mailbox
Archive Settings
Use this step to link an online archive to your mailbox. Items will be moved automatically from the primary user mailbox to the archive based on the default retention policy settings or those you define.
Create an archive mailbox for this account
< Back
Finish
Cancel

Figure 2-34. Archive Settings for Exchange Server 2010

9. Select the **Create an archive mailbox for this account** to associate an online archive mailbox with the user account.
10. Click **Finish**. The **Copy Progress** window appears and creates a report when the copying is finished.
11. Click **Print** to print the report, **Save** to save the report to your hard drive, or **Close** to close the Copy Progress window.

    The EDB source you copied is now a new mailbox in the target pane.

    Note:

    - *If the mailbox already exists and is accessible, it is added to the target directory and shown as accessible.*
    - *If the source mailbox did not exist in the target directory, a new mailbox is created on either a new user account or an existing user account.*
    - *If the mailbox you just created is not accessible, it displays in the target directory and shown as inaccessible.*

Preference Settings

Two options have been added to the Options tab of the Preferences window regarding mailbox creation through copy. See “Setting Preferences” on page 26 for more information.

- Allow mailbox creation during copy
- Prompt whether to create mailboxes during copy

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Licensing Information

License information for the Exchange Server database currently in use can be obtained by right-clicking on the source root in the source pane and selecting Save Licensing Information.

The file saves into a text format and automatically names it “ServerProperties.txt.”

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CHAPTER 3

FINDING MESSAGES

Overview

The Find in Source window lets you search a source EDB, PST, or CAS file for message items that are defined by such criteria as keywords, message senders and recipients, and message creation dates. In addition, this window lets you define the scope of your search: an EDB, PST, or CAS file, one or more mailboxes or folders (for example, Inbox), dates, or even previous search results.

The Find in Exchange Server Target window adds the ability to search a live Exchange Server target and perform actions on the search results.

Guidelines for Using the Find Window

- The **Find Now** button only becomes available if *at least one* of the following conditions is met:
  - At least one **Search in** check box is selected.
  - The **Sent from** or **Sent to** box contains at least one character.
  - The **Created Dated after** or **Created Dated before** check box is selected.
- Each **Search in** check box that you select is run as a separate query, and the results of the query are combined (i.e., OR'd together). For example, if you enter "solution" in the **Search for words** box, and then select the **Message Subject** and **Message Body** check boxes, ShadowProtect Granular Recovery for Exchange (SPGRE) will return message items that contain "solution" in either the message subject or message body.
- If you select one or more **Search in** check boxes, but specify no additional search criteria, SPGRE will return all of the message items in the folder(s) undergoing the search.
- SPGRE can search multiple information stores at the same time. In the **Find in Source** window, click **Browse** and you will see a tree view of all of the open source data stores. You can then select multiple mailboxes or folders to include in your search.
- SPGRE does not return duplicates of a message item during a search as long as the "Check for duplicate messages during search" preference is selected. For example, if the same message item exists in two or more data stores, only the first message item found is listed in the search results. For more information, see "Preference Settings" on page 63.
- The contents of an inaccessible EDB mailbox cannot be searched.

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- Messages in the Exchange Server 2010 **Recoverable Items** folder are included in search results only if the **Show Recoverable Items (Exchange Server 2010)** preference is enabled. See “Security Tab” on page 28 for more information setting preferences.

Searching Sources

The Find in source window provides the ability to search single or multiple mailboxes and perform actions on the search results.

Tip: *CAS and PST files are searchable in the source pane but not in the target pane.*

The actions allowed to perform on search results are copying or exporting message items, performing Integrity Checks, and viewing message items using the Message Views options. You can have several Find in Source windows open at a time.

To search for message items in sources

1. In the source pane, select the folder (for example, EDB or PST file, mailbox, Inbox) you want to search. The folder(s) you select defines the scope of your search.
2. Do one of the following:
   - Click **Find** in the toolbar to display the **Find in Source** window. The name of the folder you selected appears next to the **Search in folder** box.
   - Right-click the file and click **Find**.
   - On the **Tools** menu, click **Find**.
   - Press **F3**.

   Note: *The first time you search for a message item, the* ***Search in folder*** *option is automatically selected. For information on using the* ***Search in results*** *option, see “Searching Within Results” on page 69.*
3. To search multiple mailboxes or folders, click **Browse**. In the **Select Folder(s)** window, select the items you want to search. In the illustration below, two mailboxes have been selected.

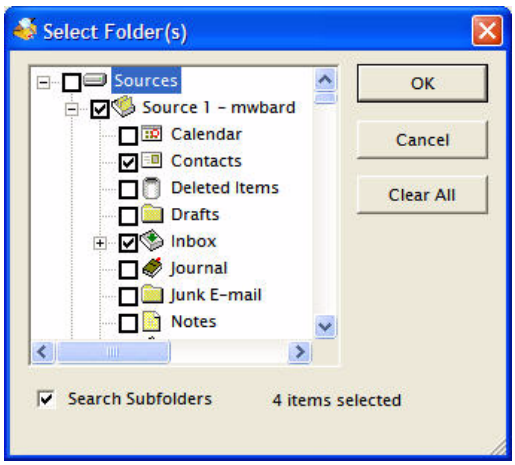

Figure 3-1. You can select multiple folders or mailboxes to search.

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Note: *If you select the Search Subfolders check box, SPGRE includes subfolders in the search.*

4. Click **OK** to return to the **Find in Source** window.

   In the following illustration, the Search in folder box now displays “Multiple folders selected.”

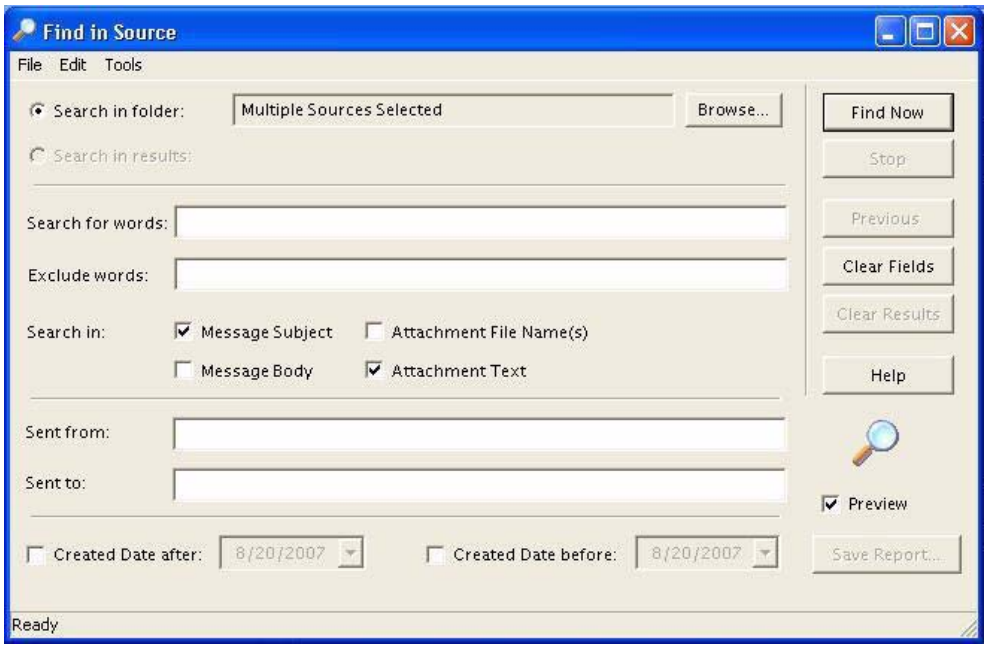

Figure 3-2. Result when multiple folders are selected

5. In the Search for words box, enter one or more words or phrases if you want to execute a keyword search. Keep in mind the following points:
   - Put a space between words or phrases to perform an AND operation (i.e., all words must be matched in order to include a message item with the search results).
   - Put a comma between words or phrases to perform an OR operation (i.e., only one of the words must be matched in order to include a message item with the search results).
   - Put quotation marks around word phrases (i.e., the exact phrase must be matched in order to include a message item with the search results).

     Example: Search for words: dog cat mouse, rat

     Search results: Message items that contain [“dog” AND “cat” AND “mouse”] OR [“rat”] are included in the search results.
6. In the **Exclude words** box, enter words or phrases if you want to perform a NOT operation. If matched, these words or phrases will exclude a message item from the search results. The rules for using spaces, commas, and quotation marks apply when excluding words from a search.

   Example: Search for words: dog cat mouse, rat

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Exclude words: bird

Search results: Message items that contain [“dog” AND “cat” AND “mouse”] OR [“rat”] BUT NOT [“bird”] are included in the search results.

7. For **Search in**, select one or more of the following check boxes: **Message Subject**, **Message Body**, **Attachment File Name(s)**, or **Attachment Text**. Each **Search in** check box that you select is run as a separate query, and the results of the query are combined (i.e., OR’d together).

   Note: *SPGRE has the ability to search multiple levels of embedded message items. Select* ***Attachment Text*** *in the* ***Select in*** *check box. See “Searching Embedded Message Items” on page 69 for more information.*

   Note about searching within attachments: *SPGRE does not search within archive file types such as .zip or .rar files. For more information, see “Searching Within Attachments” on page 74.*

8. In the **Sent from** and **Sent to** boxes, enter the appropriate names, if desired. Using the **Sent to** box is particularly useful if you are trying to find a message item sent to multiple people. The rules for using spaces, commas, and quotation marks apply when using the **Sent from** and **Sent to** boxes.
9. For **Created Dated after** and **Created Dated before**, select the appropriate check box, if desired. You may select both check boxes. Then type or select the part of the date you want to change.
   - **Created Dated after:** Searches for documents created on or after the selected date.
   - **Created Dated before:** Searches for documents created on or before the selected date.
10. When you have finished specifying search criteria, click **Find Now**. The results of your search appear in the message item list.
11. To preview the message items returned by the search, click the **Preview** check box.

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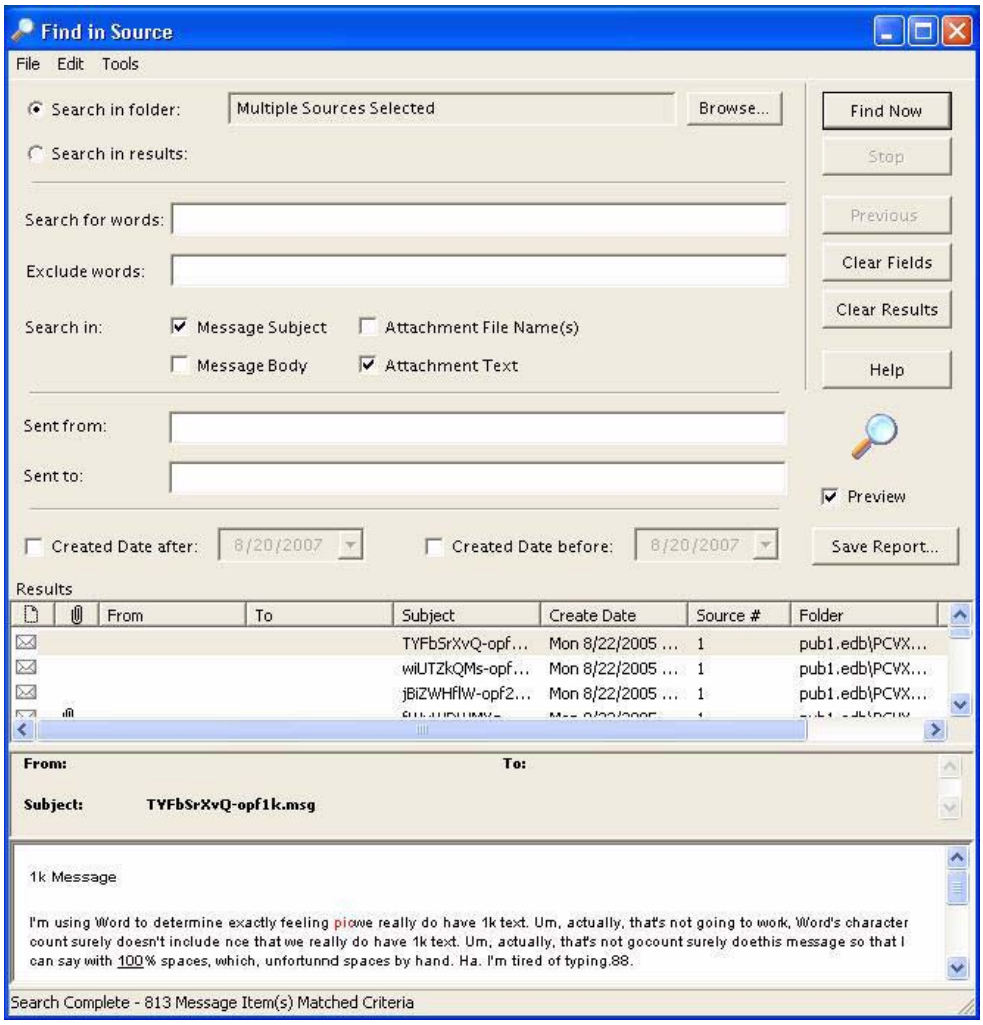

Figure 3-3. Find window with results and message pane

Searching Embedded Message Items

You can search multiple levels of embedded message items in SPGRE.

Note: *Searching attachments (email and non-email) is available only when the Agent for Advanced Searching for Exchange is enabled. See "Enabling the Licensed Agents" on page 6.*

To search embedded message items

1. Perform steps 1 through 6 in "Searching Sources" on page 66.
2. For **Search in**, click **Attachment Text**.
3. Continue with step 8 in the "Searching Sources" process.

Searching Within Results

The Search in results option lets you refine the search process using the previous search results.

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To search within results

1. To make the **Search in results** option available, you must perform at least one search.
2. Modify the search criteria as desired. For information on specifying search criteria, see "Searching Sources" on page 66.
3. Select the **Search in results** option at the top left of the **Find in Source** window.
4. Click **Find Now**. The results of your new search appear in the message item list.
5. To preview the message items returned by the search, click the **Preview** check box.

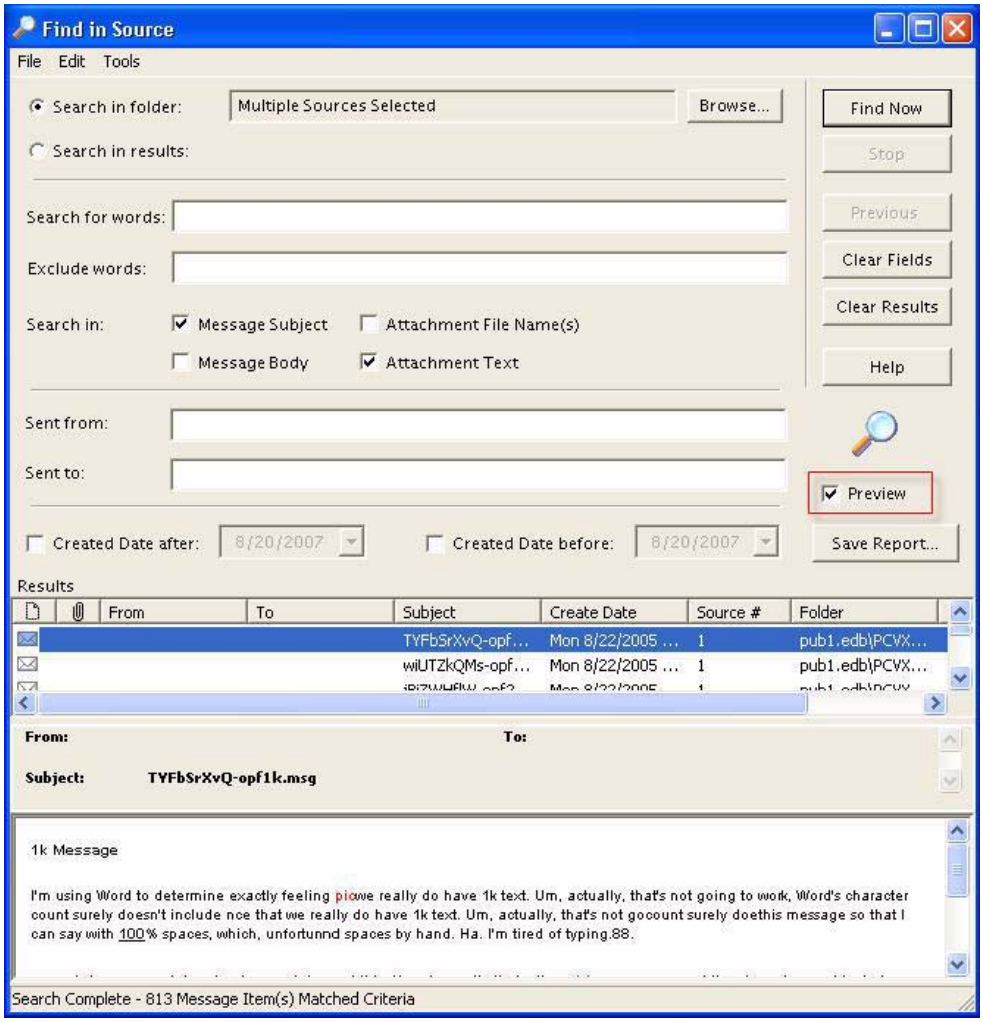

Figure 3-4. Checking the Preview option adds a message Preview pane

VIEWING PREVIOUS SEARCH RESULTS

You can click the Previous button multiple times to return to any previous search criteria and search results. This button becomes unavailable when there are no more previous results.

To view previous search results

1. Perform at least two searches so the **Previous** button becomes available.
2. Click **Previous**. The results of the previous search appear in the in the message item list.

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3. You can now view the previous search, or you can modify the search criteria and conduct a new search. For information on specifying search criteria, see “Searching Sources” on page 66.

CLEARING FIELDS AND RESULTS

If you click the Clear Fields button, all of the search criteria that you entered in the Find in Source window are returned to the default settings. If you click the Clear Results button, all current and past search results are cleared.

Searching Microsoft® Exchange Server Target

You can search a live Exchange Server target and delete, move, copy, or export the search results. This means you can search and delete, or move specific message items from an Exchange Server target. You can have only one search session Find in Exchange Target window open at one time.

Note: *Only accessible mailboxes and public folders of the Exchange Server can be searched.*

Tip: *CAS and PST files are not searchable in the target pane but are searchable in the source pane.*

To search an Exchange Server target

1. Do one of the following to display the **Find in Exchange Target** window:
   - Right-click the valid object in the target pane and click **Find**.
   - On the **Tools** menu, click **Find**.
   - On the toolbar, click the **Find** icon .
   - Press **F3**.
2. Conduct search as described in “Searching Sources” on page 66.

   Tip: *Exchange Server target search results can have an Integrity Check performed either by right-clicking the message or click Integrity Check in the Tools menu.*

Managing Message Items

Once you have performed a target search, several functions are available on the search results including cut, move, export, copy, and delete.

MOVING MESSAGE ITEMS

Moving message items from the search results to another folder within the target directory removes the message items from the original location. You can move message items by using the Move To Folder function, or by dragging and dropping to the destination folder.

Move to Folder

SPGRE presents you with a Move To Folder option and a corresponding Move Items destination selection window.

Note: *Message items cannot be moved to a Content Analysis Store (CAS).*

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To move to folder using Move To Folder

1. Do one of the following to display the **Move Items** window:
   - Right-click the message item(s) in the search results and click **Move To Folder**.
   - On the **Edit** menu, click **Move To Folder**.
2. Select a folder as the destination and click **OK**. The **Copy Progress** window appears.
3. Select **Print** to print the progress report, **Save** to save the progress report to your hard drive, or **Close** to close the window.

Moving Message Item using Drag and Drop

Drag and drop from a Find in Target search result list has a “Move” option. This option behaves in the same manner as the Move to Folder function or cut and paste.

To move to folder using drag and drop

1. Right-click the message item in the search results and drag to a mailbox in the target pane.
2. At the destination mailbox, a shortcut menu appears with the options of **Paste**, **Move**, **Paste Special**, or **Cancel**. Select one and the **Copy Progress** window appears.
3. Click **Print** to print the progress report, **Save** to save the progress report to your hard drive, or **Close** to close the window.

Copying Message Items

You can copy message items to Exchange Server and PST file targets. Only valid targets are displayed in the Copy Items window.

Copy to Folder

SPGRE presents you with a Copy To Folder option which copies the item and keeps it in its original location to be pasted in a designated location.

To copy to folder

1. On the **Edit** menu, click **Copy To Folder**. The **Copy Items** window appears.
2. Select a folder as the destination and click **OK**. The message item is now copied and pasted to the designated location.
3. In the **Copy Progress** window, click **Print** to print the progress report, **Save** to save the progress report to your hard drive, or **Close** to close the window.

Cutting and Deleting Message Items

The target search results has two new actions, cutting message items and deleting message items, which are only available in the target search results window.

Cutting Message Items

Cutting a message item moves the item from the original location to a given target.

Deleting Message Items

Deleting a message item in the search results works in a similar manner as deleting message items from the main target list. When you delete message items from the search results list, they are also deleted from the main target list if the same message item is currently displayed.

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Note: *You cannot delete message items from the main target list if the Find in Exchange Target window is open.*

Saving and Using Search Profiles

SPGRE allows you to save search criteria to a text file for the purpose of using the search criteria in future searches. There are two menu commands that allow you to perform these functions: “Save Criteria” and “Use Previous Criteria.” In addition, if you want to modify the search criteria in a search profile, you can edit the text file with a text editor.

When creating a search profile, you can save the following search criteria. The “Search For,” “Exclude Words,” “Sent from,” and “Sent to” fields have a maximum of 4,095 characters.

- Search for words
- Exclude words
- Search in
- Sent from
- Sent to
- Created Dated after
- Created Dated before

Note: *The saved criteria of a content analysis store profile folder can be used for a search. Conversely, the saved criteria for a search can be used to create a content analysis store profile folder. For more information on content analysis stores, see “Content Analysis Store” on page 117.*

To create a search profile

1. Open the **Find in Source** window, and enter search criteria.
2. On the **File** menu in the **Find in Source** window, click **Save Criteria**.
3. In the **Save As** window, specify a name and location for the search profile text file.
4. Click **Save**.

To edit a search profile

1. Locate and open the search profile that you want to edit.
2. Modify the search criteria as desired and save the text file.

To use a search profile when performing a search

1. Open the **Find in Source** window.
2. On the **File** menu in the **Find in Source** window, click **Use Previous Criteria**.
3. In the **Open** window, locate and open the search profile that you want to use for your search.
4. Click **Open**. The **Find in Source** window is populated with the search criteria specified in the search profile.

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Using Multiple Search Windows

SPGRE allows you to open multiple instances of the Find in Source window to search any combination of information stores at the same time. There is no limit other than system resources for the number of concurrent searches you can initiate.

When searching on a live Exchange Server target, you are able to have only one instance of a search session Find in Exchange target window at one time.

Note: *If you are using multiple instances of the Find in Source window to search within the same mailbox, you may notice a slowdown in performance.*

Searching Within Attachments

In both the Find in Source and Find in Exchange Target windows, you can search the text of email attachments. The Searching within Attachments feature supports Unicode text and is available for EDB, PST, CAS sources, and Exchange targets.SPGRE supports Microsoft Office documents and many other popular file types.

Note about the licensing agent: *The "Agent for Advanced Searching" must be enabled in order to search attachments. For more information, see "Enabling the Licensed Agents" on page 6.*

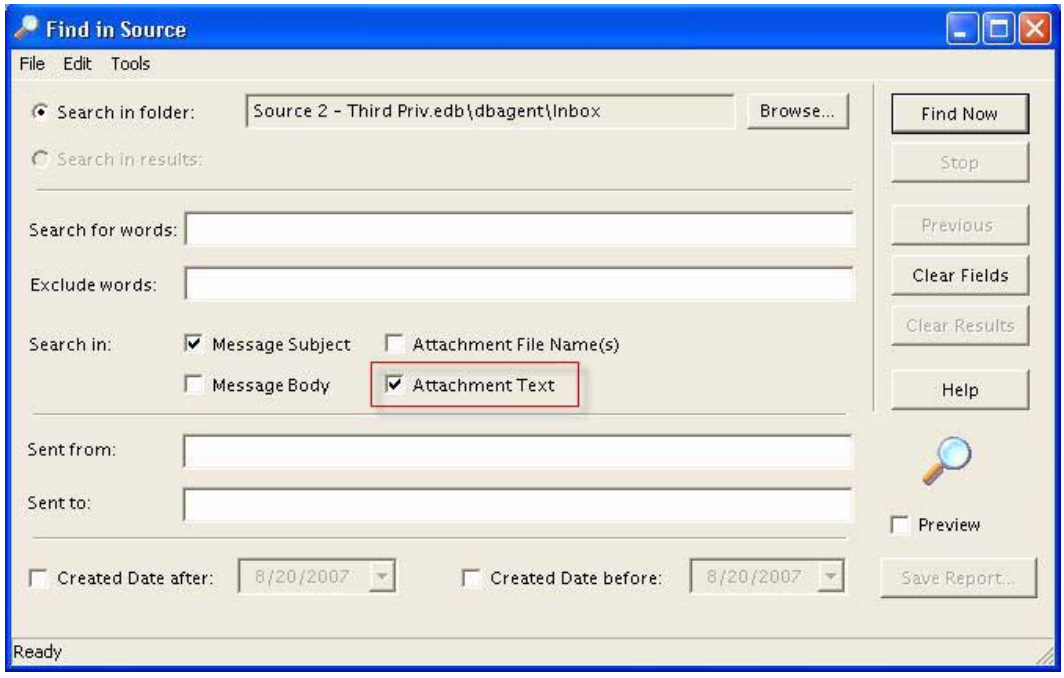

Figure 3-5. Select the Attachment Text option to include in your search

To search within attachments

1. In the **Find in Source** or **Find in Exchange Target** window, select the **Attachment Text** check box.

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2. Specify other desired search criteria. For more information, see “Searching Sources” on page 66.
3. Click **Find Now**. If SPGRE matches a keyword or phrase in the text of the attachment, it will return a “Hit” just as it would if it found a keyword or phrase in the body or subject of a message item.

Exceptions When Searching Within Attachments

SPGRE does *not* search for the following items:

- Archive files (for example, .zip, .rar)
- Binary files (for example, .dll, .exe, .jpg)
- Metadata associated with files (for example, author and company information in an .xls file)

Other SPGRE Features Available Through the Find Window

In addition to the search features described in the previous sections, there are several SPGRE features available through the Find window.

Opening and Saving Attachments in the Find Window

To open an attachment’s file type in the Find window, you must have an application installed on your computer that can perform this function. If no associated program is available for the attachment file type, SPGRE presents a message window saying the attachment cannot be viewed.

For instructions on opening and saving attachments, see “Opening Attachments” on page 18 and “Saving Attachments” on page 18.

Exporting Message Items from the Find Window

The Export feature allows you to copy individual message items from the Find window to a local or network drive destination. You can choose to save exported message items as plain text files (.txt) or Office Outlook® files (.msg).

To export message items from the Find window

1. In the **Find in Source** or **Find in Exchange Target** window, perform a search.
2. In the **Results** area, select the message items you want to export.
3. On the **Tools** menu in the **Find in Source** or **Find in Exchange Target** window, click **Export**.
4. In the **Export** window, specify options and click **Export**. For more information on the export options, see “Exporting Messages” on page 79.

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Restoring Message Items from the Find Window

The results of conducting a search appear in the message item list in the Find window. You can restore the message items in this list by dragging them or copying and pasting them into the target folder. If you want to maintain the directory structure of restored individual message items, use the Paste Special command.

You can also restore message items by browsing in the main window and dragging and dropping or copying and pasting from the main window to the target. You do not need to search to restore message items. For more information, see "Restoring Exchange Data" on page 87.

Performing an Integrity Check on Message Items in the Find in Source Window

The Find in Source window allows you to perform an integrity check on one or more message items in the Results area. During the integrity check, SPGRE verifies that it can read all of the properties of the message items.

Note: *Only accessible mailboxes can have an Integrity Check performed.*

To perform an integrity check on message items in the Find in Source window

1. In the **Find in Source** window, perform a search.
2. In the **Results** area, select the message items for which you want to perform an integrity check.
3. On the **Tools** menu in the **Find in Source** window, click **Integrity Check**. The **Integrity Check** window appears.

Search Results Report

You can save a text-based report of the search results to your local drive without having to copy or export any of the search results. The search results report is saved into a file that includes the search criteria, date/time the search was started, and a report of message items that matches the criteria.

Save Report

You can save the search results report once a search has been performed and either completed or stopped.

The Save Report button creates two text-based reports. One report contains a search session summary (**Summary Report**) and the other report contains search session message item results (**Message Report**).

Summary Report

The information included in the Summary report is the search session details and the user-defined search criteria for the search.

Message Report

The information included in the Message report is based on the column headings in the search results, message type, attachments, From and To, etc.

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To save the report

1. After conducting the search, click **Save Report**. The **Browse For Folder** window appears.
2. Select the destination for the report and click **OK**. The search results reports creates both a Message Report and a Summary Report, and are saved on your hard drive in a .txt format.

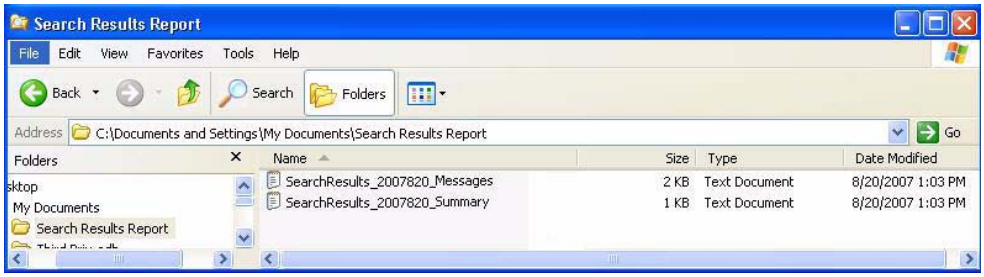
Search Results Report
File Edit View Favorites Tools Help
Back Search Folders
Address C:\Documents and Settings\My Documents\Search Results Report
Go
Folders
My Documents
Search Results Report
Name Size Type Date Modified
SearchResults_2007820_Messages 2 KB Text Document 8/20/2007 1:03 PM
SearchResults_2007820_Summary 1 KB Text Document 8/20/2007 1:03 PM

Figure 3-6. Summary and Messages Reports

The files are named using the date of the search and a suffix indicating the type of report. For example, if you run a search on 5/8/2007, the report names are:
SearchResults_20070508_Summary.txt for the summary report, or
SearchResults_20070508_Messages.txt for the message report.

For cases where you choose to create more than one set of reports on the same date, files are named using an incremental numbering convention starting with "1." If you run a second search on 5/8/2007, the report names are:

SearchResults_20070508(1)_Summary.txt for the summary report, or
SearchResults_20070508(1)_Messages.txt for the message report.

3. Clicking **Cancel** during the report generation progress terminates the process and any reports created for this Save Report action are deleted from the report destination.

USING THE REPORT

The text summary or message report is tab delimited and can be imported into a spreadsheet if desired. Simply drag the .txt file from its location into a blank spreadsheet. The source # in the search results is replaced with the full path to its location in the report.

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CHAPTER 4

EXPORTING MESSAGES

Overview

You can export mail from an EDB, PST, or CAS source file to a local or network drive destination. Exported messages can be saved as Microsoft® Office Outlook® files (.msg) or plain text files (.txt). This can assist you in copying old email backups into an alternate or non-email system. You can export at all levels: an EDB file, a PST file, a CAS file, a CAS profile folder, a mailbox, a folder, and individual messages. EDB files can be exported to PSTs.

General Information about Exporting Messages

- The **file name** for an exported message is its subject. A duplicate subject name will create a file with the same name but with an (x) appended to the filename: x = 1 for the first duplicate, x = 2 for the next duplicate, and so on. If the subject contains illegal file name characters, the offending characters will be replaced with an underscore.
- **Associated messages** and **folder properties** will not be exported.
- When **exporting individual messages**, you have the option to keep the folder/mailbox hierarchy, similar to the paste special feature. When **exporting a mailbox or folder**, you have the option to also export the subfolders.
- Messages in the Exchange Server 2010 **Recoverable Items** folders can be exported if the **Show Recoverable Items (Exchange Server 2010)** preference is enabled.
- When exporting the **Recoverable Items** folder, it is renamed to distinguish the copied version from the actual version. The folder is renamed using the localized short date in parenthesis and appended to the folder name. **Example:** “Recoverable Items (10/22/2009)”

About Message (.msg), Text (.txt), and PST Export

The file type for an exported message can be either Office Outlook (.msg) or plain text (.txt). EDB files can be exported to a PST.

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Message (.msg) export

A .msg file (OLE compound document) can be imported directly into Outlook. This file type encapsulates the entire message including attachments.

Text (.txt) export

A .txt file is created with the following information. Note that neither message attachments nor message properties are exported.

PST export

The Export to PST option allows you to generate PST files for one or all users' mailboxes from an off-line EDB file. ShadowProtect Granular Recovery for Exchange (SPGRE) generates a single PST file for each user's mailbox. See "Exporting to PST" on page 84 for more information.

Exporting Messages

The following instructions show you how to export an EDB file, a PST file, a CAS file, a CAS profile folder, mailboxes, folders, and messages from the source pane in the main window. They also show you how to export messages from the Find in Source or Find in Exchange Target window.

Note: *Only accessible mailbox items can be exported. If you are exporting a CAS file, only accessible mailboxes are included in the export.*

To export an entire EDB file

1. In the source pane, select the EDB file.
2. Do one of the following:
   - On the **Tools** menu, click **Export**.
   - On the toolbar, click the **Export** icon .
   - Right-click the EDB file, and on the shortcut menu, click **Export**. The **Export EDB** window appears.

Figure 4-1. MSG or TXT format can be selected for Export

3. In the **Format** box, select MSG or TXT.
4. In the **Export To** box, specify the location for the exported EDB file.
5. Click **Export**.

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6. In the **Export Progress** window, verify the EDB file was successfully exported, and click **Close**.

To export a PST file, a mailbox, or a folder

1. In the source pane, select a PST file, a mailbox or a folder (for example, Inbox).
2. Do one of the following:
   - On the **Tools** menu, click **Export**.
   - On the toolbar, click the **Export** icon .
   - Right-click the mailbox or folder, and on the shortcut menu, click **Export**. The **Export Mailbox** or **Export Folder** window appears.

Figure 4-2. Export Mailbox window

Figure 4-3. Export Folder window

3. In the **Format** box, select MSG or TXT.
4. In the **Export To** box, specify the location for the exported mailbox or folder.
5. Select the **Export Subfolders** check box if you want to export all of the subfolders for the selected mailbox or folder.
6. Click **Export**.
7. In the **Export Progress** window, verify the mailbox or folder was successfully exported, and click **Close**. The mailbox or folder appears in the specified location. In the illustration below, the exported folder is the Inbox.

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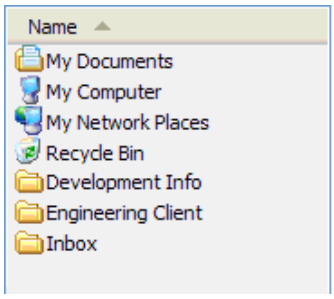

Figure 4-4. The exported Inbox appears in the specified location

To export individual messages

1. In the source pane, select one or more messages from the message list.
2. Do one of the following:
   - On the **Tools** menu, click **Export**.
   - On the toolbar, click the **Export** icon .
   - Right-click the selection, and on the shortcut menu, click **Export**. The **Export Messages** window appears.

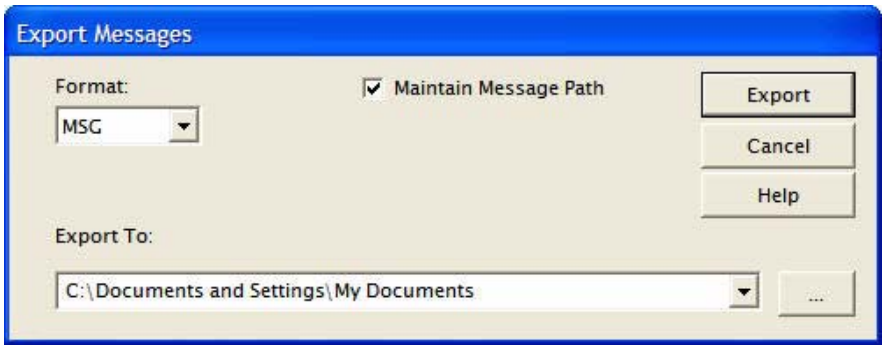

Figure 4-5. MSG or TXT format can be exported

3. In the **Format** box, select MSG or TXT.
4. In the **Export To** box, specify the location for the exported messages.
5. Select the **Maintain Message Path** check box if you want to maintain the directory structure of the exported messages.
6. Click **Export**.
7. In the **Export Progress** window, verify your messages were successfully exported, and click **Close**. The messages appear in the specified location. In the illustration below, the exported messages come from the “User 1” mailbox.

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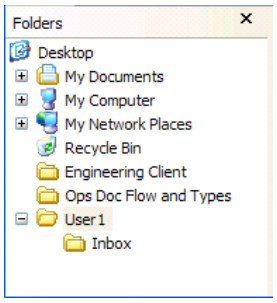

Figure 4-6. Messages appear in specified location

To export individual messages from the Find window

1. In the **Find in Source** or **Find in Exchange Target** window, select one or more messages from the message list.
2. Right-click the selection, and on the shortcut menu, click **Export**.
3. Perform steps 3-7 in the preceding section.

To export individual messages from the source content analysis store profile folders

1. In the source message pane, select a profile folder, then select one or more messages from the message list.
2. Do one of the following:
   - On the **Tools** menu, click **Export**.
   - On the toolbar, click the **Export** icon .
   - Right-click the selection, and on the shortcut menu, click **Export**. The **Export Messages** window appears.

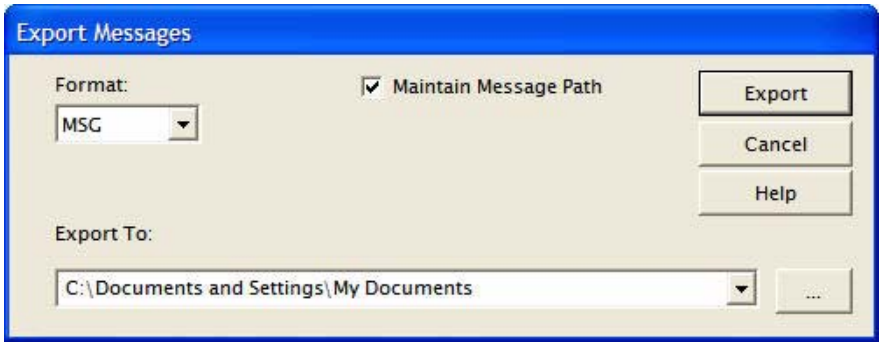

Figure 4-7. MSG or TXT format can be exported

3. In the **Format** box, select MSG or TXT.
4. In the **Export To** box, specify the location for the exported messages.
5. Select the **Maintain Message Path** check box if you want to maintain the directory structure of the exported messages.
6. Click **Export**.
7. In the **Export Progress** window, verify your messages were successfully exported, and click **Close**.

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Exporting to PST

The Export to PST option allows you to generate PST files for one or all users' mailboxes from an off-line EDB file. SPGRE generates a single PST file for each user's mailbox. If Outlook 2003 or greater is installed on your computer, you have the option of creating either Outlook 97-2002 style PST files or Outlook 2003 style PST files.

This feature is available with the following source selections in the source pane:

- **EDB Source(s)**—Export all mailboxes to PST files
- **One mailbox within an EDB Source**—Export EDB mailbox to PST files

Note: *EDB sources that are a result of a search cannot be exported to PST.*

Note: *Before exporting to PST, ensure that you have sufficient disk space available at the destination of the PST export.*

To export to PST

1. Highlight the item to export.
2. Do one of the following:
   - Right-click and click **Export**
   - On the toolbar, click the Export icon .
   - On the **Tools** menu, click **Export**.
3. Select **PST** in the **Format** drop-down list.
4. Select the destination in **Export To** field.
5. Click **Export**. The **Outlook Version** window appears.

   Note: *If your system has Outlook 2003 or later installed, then SPGRE has the capability to create either Outlook 97-2002 or Outlook 2003 style PST files. If this is the case, you are presented with a window prompting you to select which style of PST you want to create.*

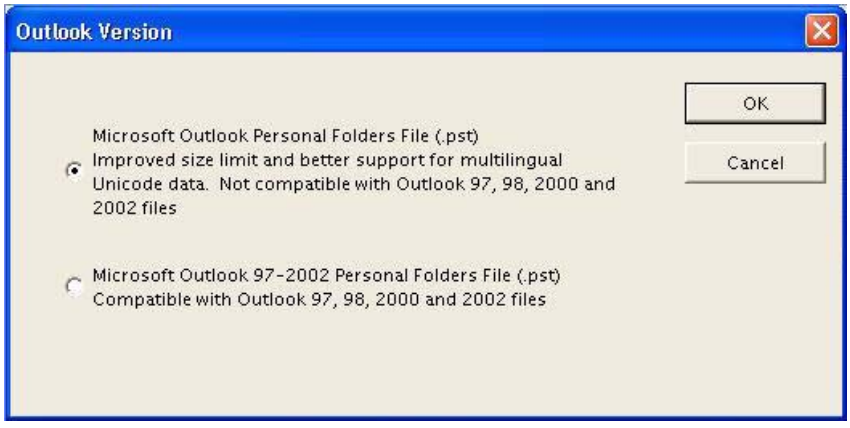
Outlook Version
OK
Cancel
Microsoft Outlook Personal Folders File (.pst)
Improved size limit and better support for multilingual Unicode data. Not compatible with Outlook 97, 98, 2000 and 2002 files
Microsoft Outlook 97-2002 Personal Folders File (.pst)
Compatible with Outlook 97, 98, 2000 and 2002 files

Figure 4-8. Select Outlook Version

6. Select the appropriate version of Outlook and click **OK**. The **Export Progress** window is displayed.

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7. After the export has completed, click **Print** to send to printer, **Save** to save a .txt report of the export to your local drive, or **Close** to close the window.

To use exported PST

1. Navigate to the location where the PST was created.
2. Drag and drop the PST into SPGRE in either the source or the target pane. The **Select Source Files** window appears.
3. Click **OK**. The PST now appears in the target or source directory.

Output

Note: *By default, the limit for a .pst file in Outlook 2003 and in Outlook 2007 is configured to be 20 GB. As a result, exporting Outlook 2003 or Outlook 2007 .pst files larger than 20 GB is not supported.*

The PST files generated are named according to the mailbox name and placed in a folder named after the EDB. For example, if you wanted to export all the mailboxes from Priv1.edb (John Doe, Jane Doe, and User5), and you selected C:\PST as the "Export To:" folder, the exported folders and PST files would look like:

C:			
	PST		
		Priv1.edb	
			John Doe.pst
			Jane Doe.pst
			User5.pst

Already Existing Files

If any of the exported PST files already exist, SPGRE adds a number in parenthesis to the file name so that it does not conflict with an existing file. For example, if John Doe.pst already exists, then the exported PST for John Doe would be named "John Doe(1).pst." If John Doe(1).pst also exists, then the exported PST would be named "John Doe(2).pst."

Note: *There is a 2 GB limit for Outlook 97-2002 style PSTs. See "Limits for PST and Folder Targets" on page 88 for more information.*

About the Export Progress Window

Each time you attempt to export messages, the **Export Progress** window appears. This window displays the following information:

- Source and target
- Export start time

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- Number of folders to export
- Number of messages to export
- Warnings or errors encountered during the export process. If an error occurs on a message, the message subject and source path along with an error message will be displayed. If the message does not have a subject, the date (created) and message sender will be displayed instead.
- Total folders and messages successfully exported

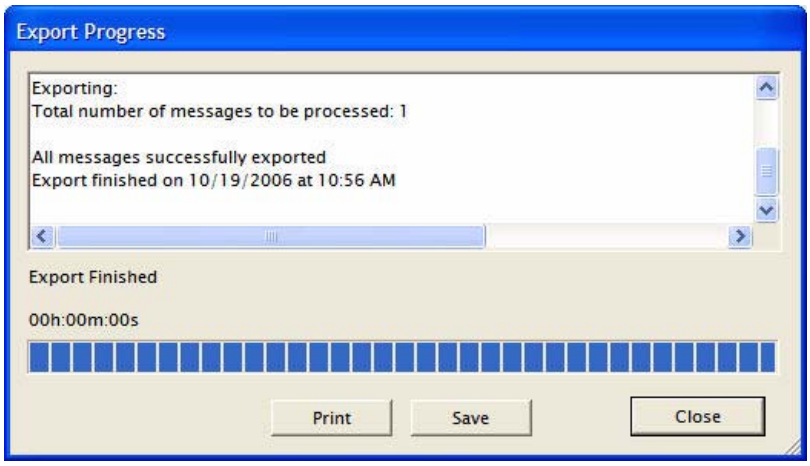

Figure 4-9. The export progress is shown

Note:

- *If an error occurs that SPGRE can recover from, such as a corruption that prevents it from getting a message property, SPGRE will log an error, stop processing that message, and continue.*
- *If an error occurs from which SPGRE cannot recover, such as a major corruption error, SPGRE will log an error to the Export Progress window and stop exporting.*

Saving and Printing the Report

The contents of the export report can be saved by clicking **Save**. This brings up a Save File dialog box allowing you to select the location and name of the file. The default name of the report is "ExportProgress.txt."

The export report can also be printed by clicking **Print**.

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CHAPTER 5

RESTORING EXCHANGE DATA

Overview

The first part of this chapter provides you with a quick look at restoring your Exchange database, so you can begin to use the Exchange application of ShadowProtect Granular Recovery for Exchange (SPGRE) immediately. The second part of this chapter provides examples of restoring messages, folders, mailboxes, and even an entire EDB file to the desired destination.

Note: *The concepts in this chapter apply to EDB, PST, and CAS files (unless otherwise noted), even though all of the examples of sources are EDB files.*

Quick Look at Restoring Your Exchange Data

Restoring data from a source EDB, PST, or CAS file to a target destination is a simple process. Just drag and drop or use the Copy and Paste/Paste Special commands.

- "Restoring Your Exchange Data in Three Easy Steps" on page 87
- "Limits for PST and Folder Targets" on page 88
- "About Restoring Messages to an Exchange Server" on page 89
- "About the Copy Progress Window" on page 89
- "Creating, Renaming, and Deleting Folders in the Target Pane" on page 90
- "Copying and Pasting or Dragging and Dropping" on page 90

Restoring Your Exchange Data in Three Easy Steps

If you copy an EDB file, a PST file, a mailbox, or a folder from the source pane and paste it to any target destination, SPGRE will preserve the directory structure of all restored messages. When restoring individual messages, you must use the Paste Special command to preserve their directory structure.

To restore individual messages with copy-paste

1. In the source pane or **Find in Source** window, copy messages from the message list.
2. In the target pane, paste the messages into a folder.

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3. In the **Copy Progress** window, verify that your messages were successfully copied, and click **Close**.

To restore individual messages with copy-paste special

1. In the source pane or **Find in Source** window, copy messages from the message list.
2. In the target pane, use **Paste Special** to paste the messages into a folder, mailbox, PST root, or Exchange Server root.
3. In the **Copy Progress** window, verify that your messages were successfully copied, and click **Close**.

Tip: *Use the **Paste Special** command to retain the directory structure of messages copied from the **Find in Source** or **Find in Exchange Target** window, because messages in this window often come from several source locations.*

To restore a folder, a mailbox, an EDB file, a CAS file, or a PST file

1. In the source pane, copy a folder, a mailbox, an EDB file, a CAS file, or a PST file.
2. In the target pane, paste the copied item into a folder, mailbox, PST root, or Exchange Server root.
3. In the **Copy Progress** window, verify that your messages were successfully copied, and click **Close**.

   Note: *You cannot open the same PST as a source and target. In addition, you cannot restore messages from a PST file to an Exchange Server root node.*

To restore data even faster, use drag-and-drop

- **Example:** To restore an entire EDB file, drag it to the target Exchange Server root.

Limits for PST and Folder Targets

When restoring Exchange Data to a target PST or folder, Outlook 97-2002 style PSTs have the following limits:

2 GB PST Limit

When a target PST file reaches 1.8 GB, SPGRE creates a new PST for the additional messages. The new PST file has the same name as the original target PST file, plus an appended number in parentheses: Personal Folders (1), Personal Folders (2), and so on. SPGRE creates the folder path in the new PST and continues to restore Exchange data where it left off.

Note: *The 1.8 GB limit applies only to PST files created by Microsoft Outlook 2002 and earlier. This limit does not apply to the new type of PST files created by Microsoft Outlook 2003/2007.*

16,383 Messages Per Folder (for example, Inbox) Limit

When a target folder (for example, Inbox) reaches 16,383 messages, SPGRE creates a new PST folder for the additional messages. The new folder has the same name as the original target folder plus an appended number in parentheses: Inbox (1), Inbox (2), and so on. SPGRE creates the folder path in the new folder and continues to restore Exchange data where it left off.

Note: *If you have upgraded the PST file to a large table format, the PST can hold 64,000 messages per folder. However, when a target folder (for example, Inbox) reaches 16,383 messages, SPGRE still creates a new PST folder for the additional messages.*

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To turn off the preference setting for the PST messages per folder limit

If you do not want SPGRE to create new folders when the number of messages reaches 16,383, do the following:

1. On the **Edit** menu, click **Preferences**.
2. In the **Preferences** window, click the **Options** tab, and then clear the **Create new PST folders when PST message/folder limits are reached** check box.

Note: *If you turn off the preference, all messages above the messages per folder limit will fail to copy correctly, and the PST file may become corrupt.*

About Restoring Messages to an Exchange Server

You must have sufficient access rights to all of the Exchange mailboxes you are trying to restore messages to. Keep in mind that you can connect to only one mailbox at a time.

Restoring Messages to Exchange Server 2000/2003/2007/2010

In Exchange Server 2000/2003/2007/2010, the permission that controls whether or not any mailbox can be copied to is Full Mailbox Access. You must have Full Mailbox Access set to "Allow" in order to copy to a mailbox other than the one you logged in under.

Restoring Messages to Exchange Server 5.5

In Exchange Server 5.5, the account you are logged in under needs an Exchange Service Account Administrator rights or role. As long as you copy this role to your account, you can restore messages to any mailbox.

About the Copy Progress Window

Each time you attempt to restore messages to the target pane, the **Copy Progress** window appears. This window displays the following information about the copy operation:

- Time of copy operation
- Number of messages, associated messages, and folders
- Errors, if any
- Mailboxes that SPGRE connected to or failed to connect to when copying to an Exchange Server
- Copy results

Important: *Viewing the copy results in Copy Progress window is especially important when attempting to restore multiple items to an Exchange Server root node. That is because SPGRE restores one mailbox at a time; therefore, the only way you will know if all of the mailboxes were successfully copied to the Exchange Server will be to look at the copy results listed in this window.*

If you do not have full access rights to the mailboxes you are trying to restore messages to, SPGRE will be unable to connect to the mailboxes. For more information, see "About Restoring Messages to an Exchange Server" on page 89.

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Creating, Renaming, and Deleting Folders in the Target Pane

The target pane has folders in which you can place your restored messages. However, you may want to create new folders for your messages. You can also rename or delete any folder in the target pane.

To create a new folder in the target pane

1. In the target pane, select a folder, a PST root node, or an Exchange mailbox.
2. Do one of the following:
   - On the **Edit** menu, click **New Folder**.
   - Right-click and on the shortcut menu, click **New Folder**.
   - Press **Ctrl+N**.
3. In the **Create New Mail Folder** window, name the folder and click **OK**. A subfolder is created in the target folder.

To rename a folder in the target pane

1. In the target pane, select a folder.
2. Do one of the following:
   - On the **Edit** menu, click **Rename**.
   - Right-click and on the shortcut menu, click **Rename**.
   - Press **Ctrl+R**.
3. Type a new name for the folder.

   Note: *You can also rename a PST root.*

To delete a folder in the target pane

1. In the target pane, select a folder.
2. Do one of the following:
   - On the **Edit** menu, click **Delete**.
   - Press the **Delete** key.

Copying and Pasting or Dragging and Dropping

In SPGRE, you can restore data to the target pane by using Copy-Paste, Copy-Paste Special, or Drag-and-Drop.

Note: *If you copy the Recoverable Items folder, it is renamed to distinguish the copied version from the actual version. The folder is renamed using the localized short date in parenthesis and appended to the folder name.* ***Example:*** *"Recoverable Items (10/22/2009)"*

To copy an item in the source pane or Find window

1. In the source pane or **Find in Source** window, select messages, a folder, a mailbox, or the entire EDB file.

   Note: *In the* ***Find in Source*** *window, you can only select messages.*

2. Do one of the following:
   - On the **Edit** menu, click **Copy**.

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- Right-click the selected item(s), and on the shortcut menu, click **Copy**.
- Click the Copy Mail Item icon on the toolbar.
- Press **Ctrl+C**.

To paste an item in the target pane

1. In the target pane, select a folder, a mailbox, the PST root node, or the Exchange root node.
2. Do one of the following:
   - On the **Edit** menu, click **Paste**.
   - Right-click the selected item, and on the shortcut menu, click **Paste** or **Paste Special**. For more information on using the Paste Special command, see "Restoring Messages with Paste Special" on page 92.
   - Click the **Paste** icon on the toolbar.
   - Press **Ctrl+V** (Paste) or **Ctrl+Y** (Paste Special).

To use drag-and-drop

- Drag an item from the source pane into a folder in the target pane. Dragging and dropping achieves the same results as copying and pasting.

To use drag-and-drop when right-clicking a source item

1. In the source pane, select one or more messages.
2. Right-click the selected messages and drag them to a folder in the target pane.
3. When you let go of the mouse, a shortcut menu appears. On the shortcut menu, click **Paste** or **Paste Special**. For more information on using the Paste Special command, see "Restoring Messages with Paste Special" on page 92.

Examples of Restoring Your Exchange Data

This section provides examples of restoring messages, folders, mailboxes, and even an entire EDB file to the desired destination. In each case, it provides guidelines for restoring messages.

Note: *The concepts in this chapter apply to both EDB and PST files (unless otherwise noted), even though all of the following examples are EDB files.*

Restoring Messages with Copy-Paste

The following instructions show you how to restore individual messages to a *folder* in a target PST file or Exchange Server by using Copy-Paste. Keep in mind that using Drag-and-Drop achieves the same results.

Guidelines for Restoring Messages

- You can copy messages from the message list in the source pane or the **Find in Source** window.
- You can use **Drag-and-Drop** or **Copy-Paste** to restore individual messages to a *folder* in the target pane.

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- You cannot use **Drag-and-Drop** or **Copy-Paste** to restore individual messages to a PST root node, an Exchange Server root node, or an Exchange mailbox. However, you can use **Paste Special** to restore individual messages to these locations.
- Using **Drag-and-Drop** or **Copy-Paste** to restore individual messages does not preserve the directory structure of the restored messages. If you want to preserve the directory structure of restored individual messages, use **Paste Special**.
- You cannot copy-paste inaccessible mailboxes.

Tip: *For information on **Paste Special**, see "Restoring Messages with Paste Special" on page 92.*

To restore messages with copy-paste

1. In the source pane or **Find in Source** window, copy messages from the message list.
2. In the target pane, paste the messages into a folder (for example, Inbox) in the target PST file or Exchange Server.
3. In the **Copy Progress** window, verify that your messages were successfully copied. You can also print or save the copy report by doing one of the following.
   - Click **Print** to print the copy report.
   - Click **Save** to save the copy report as a text file.
4. In the **Copy Progress** window, click **Close** to return to the main window.

Results of Restoring Messages with Copy-Paste

All unduplicated messages appear in the target folder.

Restoring Messages with Paste Special

You can use the Paste Special command to preserve the directory structure of restored individual messages. The Paste Special command is especially useful when restoring messages from the message list in the Find window, since these messages often come from several source locations.

Guidelines for Restoring Messages with Paste Special

- You can use the Paste Special command to restore individual messages to any target destination. Using the Paste Special command preserves the directory structure of the restored messages.
- You can use the Paste Special command to restore *individual messages* only. You cannot use the Paste Special command to restore an entire EDB file, a mailbox, or a folder.
- You *cannot* use Paste Special to restore messages to a public folder.
- **If the target is a PST root node or folder**, SPGRE creates a folder to represent each mailbox. Each mailbox is a subfolder of the folder the user selected for the Paste Special operation.
- **If the target is an Exchange Server mailbox or folder**, SPGRE copies all messages to the target. Each mailbox is a subfolder of the folder the user selected for the Paste Special operation.
- **If the target is an Exchange Server root node**, the Paste Special code attempts to connect to each mailbox one at a time and copies each message to its corresponding mailbox and folder. If the folder does not exist, it will be created. If the mailbox does not exist, SPGRE logs an error in the copy results, skips the entire mailbox, and continues the Paste Special operation.

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Note: *You cannot restore messages from a PST file to an Exchange Server root node.*

To restore messages to a PST root or folder with Paste Special

If the target is a PST root node or folder, SPGRE creates a folder to represent each mailbox. Each mailbox is a subfolder of the folder you selected for the Paste Special operation.

1. In the source pane or **Find in Source** window, copy messages from the message list.
2. In the target pane, use **Paste Special** to paste the messages into a PST root node or folder.
3. In the **Copy Progress** window, verify that your messages were successfully copied. You can also print or save the copy report by doing one of the following.
   - Click **Print** to print the copy report.
   - Click **Save** to save the copy report as a text file.
4. In the **Copy Progress** window, click **Close** to return to the SPGRE main window.

Results of Restoring Messages to a PST Root Node or Folder with Paste Special

All unduplicated messages appear in the target destination, and their directory structure will be preserved.

To restore messages to an Exchange Server mailbox or folder with Paste Special

If the target is an Exchange Server mailbox or folder, SPGRE copies all messages to the target. Each mailbox is a subfolder of the folder you selected for the Paste Special operation.

1. In the source pane or **Find in Source** window, copy messages from the message list.
2. In the target pane, use **Paste Special** to paste the messages into an Exchange mailbox or folder.
3. In the **Copy Progress** window, review your results to make sure all the messages were copied to the target destination. You can also print or save the copy report by doing one of the following.
   - Click **Print** to print the copy report.
   - Click **Save** to save the copy report as a text file.
4. In the **Copy Progress** window, click **Close** to return to the SPGRE main window.

Results of Restoring Messages to an Exchange Server Mailbox or Folder with Paste Special

Each mailbox is a subfolder of the target destination, and all unduplicated messages are restored. In addition, their directory structure is preserved.

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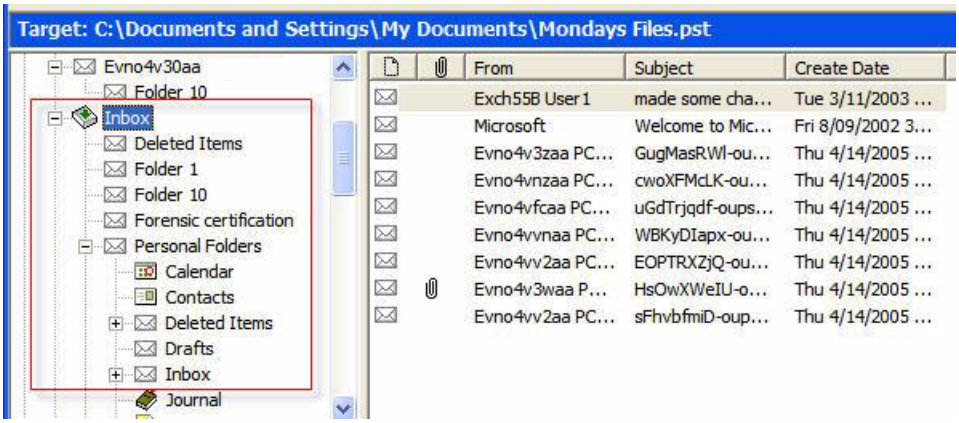

Figure 5-1. Results of using Paste Special on a target Exchange mailbox

To restore messages to an Exchange Server root node with Paste Special

If the target is an Exchange Server root node, SPGRE attempts to connect to each mailbox one at a time and copies each message to its corresponding mailbox and folder. If the folder does not exist, it is created. If the mailbox does not exist, SPGRE logs an error in the Copy Progress window, skips the entire mailbox, and continues the Paste Special operation.

Important: *The source mailbox must exist on the target Exchange Server, and you must have full mailbox access rights to all of the Exchange mailboxes to which you are trying to restore messages. For more information on access rights, see "About Restoring Messages to an Exchange Server" on page 89.*

1. Select one or more messages from the message list in the **Find in Source** window or the source pane.
2. In the source pane or **Find in Source** window, copy messages from the message list.
3. In the target pane, use **Paste Special** to paste the messages into an Exchange Server root node.
4. In the **Copy Progress** window, verify your results to make sure that your messages from all mailboxes were copied to the target destination. You can also print or save the copy report by doing one of the following:
   - Click **Print** to print the copy report.
   - Click **Save** to save the copy report as a text file.
5. In the **Copy Progress** window, click **Close** to return to the main window.

Results of Restoring Messages to an Exchange Server Root Node with Paste Special

All unduplicated messages are restored in each mailbox that SPGRE can connect to, and the directory structure of the messages is preserved.

When attempting to restore multiple mailboxes to an Exchange Server root node, you must look at the Copy Progress window to verify that your messages from all mailboxes were successfully copied to the Exchange Server. That is because SPGRE displays only one mailbox at a time in the target pane.

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Restoring a Folder

The following instructions show you how to restore a folder to any target destination by using Copy-Paste. Keep in mind that using Drag-and-Drop achieves the same results.

Guidelines for Restoring a Folder

- You can use **Drag-and-Drop** or **Copy-Paste** to restore a folder to a target PST root node or folder, or to an Exchange Server mailbox or folder. If the folder does not exist in the target destination, it is created.
- You *cannot* restore a folder to an Exchange Server root node.
- You *cannot* restore a private folder to a public folder. But you *can* restore messages from a private folder to a public folder.
- You *cannot* use the **Paste Special** command to restore a folder. You can use the **Paste Special** command to restore individual messages only.
- If you copy the Recoverable Items folder, it is renamed to distinguish the copied version from the actual version. The folder is renamed using the localized short date in parenthesis and appended to the folder name. **Example:** "Recoverable Items (10/22/2009)"

To restore a folder

1. In the source pane, copy a folder (for example, Inbox).
2. In the target pane, paste the folder into a folder, mailbox, or PST root node.
3. In the **Copy Progress** window, verify your results to make sure that your messages from all mailboxes were copied to the target destination. You can also print or save the copy report by doing one of the following.
   - Click **Print** to print the copy report.
   - Click **Save** to save the copy report as a text file.
4. In the **Copy Progress** window, click **Close** to return to the main window.

Results of Restoring a Folder

All unduplicated messages in the folder are restored and their directory structure is preserved. If the folder does not exist in the target destination, it is created.

Note: *No folder is created because the copied folder (Inbox) already exists in the target Exchange mailbox.*

Restoring a Mailbox

The following instructions show you how to restore a mailbox to any target destination by using Copy-Paste. Keep in mind that using Drag-and-Drop achieves the same results.

Guidelines for Restoring a Mailbox

- You can use **Drag-and-Drop** or **Copy-Paste** to restore a mailbox to a target PST root node or folder, or to an Exchange Server root node, mailbox, or folder.
- **If you restore a mailbox to a target PST root node:** Messages from folders in the source PST are restored to corresponding folders in the target PST (for example, messages from the source Inbox are restored to the target Inbox). If a corresponding folder does not exist in the target destination, it is created.

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- **If you restore a mailbox to a to a target PST folder, or to an Exchange Server, mailbox, or folder:** If the mailbox does not exist in the target destination, a folder with its name is created.

  Important: *If you want to restore a mailbox to a target Exchange Server root node, the source mailbox must exist on the target Exchange Server, and you must have full mailbox access rights to all of the Exchange mailboxes you are trying to restore messages to. For more information on access rights, see "About Restoring Messages to an Exchange Server" on page 89.*

- You *cannot* restore a mailbox to a public folder. But you *can* restore messages from a mailbox to a public folder.
- You *cannot* use the **Paste Special** command to restore a mailbox. You *can* use the Paste Special command to restore individual messages only.

To restore a mailbox

1. In the source pane, copy a mailbox (for example, PC User 1).
2. In the target pane, paste the mailbox into a folder, mailbox, PST root node, or Exchange Server root node.
3. In the **Copy Progress** window, verify your results to make sure that your messages from all mailboxes were copied to the target destination. You can also print or save the copy report by doing one of the following.
   - Click **Print** to print the copy report.
   - Click **Save** to save the copy report as a text file.
4. In the **Copy Progress** window, click **Close** to return to the main window.

Results of restoring a mailbox

All unduplicated messages in a mailbox are restored and their directory structure is preserved.

If the mailbox does not exist in the target destination, a folder with its name is created. However, if you restore a mailbox to a target PST root node, a mailbox is not created. Instead, messages from folders in the source PST are restored to corresponding folders in the target PST.

Restoring an EDB File

The following instructions show you how to restore an entire EDB file to any target destination with Copy-Paste. Keep in mind that using Drag-and-Drop achieves the same results.

Guidelines for Restoring an EDB File

- It is recommended that you restore an EDB file to a target Exchange Server root node.
- You can use **Drag-and-Drop** or **Copy-Paste** to restore an entire EDB file. You cannot use the **Paste Special** command to restore an EDB file. You can use the Paste Special command to restore individual messages only.

  Important: *If you restore an EDB file to a target Exchange Server root node, the source mailbox must exist on the target Exchange Server, and you must have full mailbox access rights to all of the Exchange mailboxes to which you are trying to restore messages. For more information on access rights, see "About Restoring Messages to an Exchange Server" on page 89.*

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To restore an EDB file

1. In the source pane, select the EDB file.
2. On the **Edit** menu, click **Copy**.
3. In the target pane, select the Exchange Server root node.
4. On the **Edit** menu, click **Paste**.
5. In the **Copy Progress** window, review your results to make sure all the messages were copied to the target destination. You can also print or save the copy report by doing one of the following.
   - Click **Print** to print the copy report.
   - Click **Save** to save the copy report as a text file.
6. In the **Copy Progress** window, click **Close** to return to the main window.

Results of restoring an EDB file

SPGRE attempts to connect to each mailbox in the target pane one at a time and copies each message to its corresponding mailbox and folder. If the folder does not exist, it will be created. If the mailbox does not exist, SPGRE logs an error in the Copy Progress window, skips the entire mailbox, and continues the operation.

Restoring to Public Folders

The following instructions show you how to restore messages or public folders to a public folder target. An option to open public folders is available upon connection to an Exchange Server.

Important: *SPGRE opens public folders and your mailbox when you connect to an Exchange target. You will see those folders that you have permission to see.*

Guidelines for Restoring to Public Folders

- You can restore folders from a pub.edb database to a public folder target. All public folder permissions are transferred to the target folders. However, folder permissions may not transfer if the version of the source Exchange Server is different than the version of the target Exchange Server.
- You *can* restore messages from any database source or search results to a public folder target.
- You *cannot* restore a folder or mailbox from a private database to a public folder target. But you *can* restore messages in a folder or mailbox to a public folder.
- You *cannot* use Paste Special when restoring messages to a public folder target.

  Note: *The ability to restore to public folders is also available at the command line.*

To restore messages to a target Public Folders

1. In the source pane or **Find in Source** window, copy messages from the message list.
2. In the target pane, paste the messages into the target root public folder or a folder in the public folder.
3. In the **Copy Progress** window, verify that your messages were successfully copied. You can also print or save the copy report by doing one of the following.
   - Click **Print** to print the copy report.
   - Click **Save** to save the copy report as a text file.

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4. In the **Copy Progress** window, click **Close** to return to the main window.

To restore a folder from a public database to a target Public Folders

1. In the source pane copy a folder from a public database.
2. In the target pane, paste the folder into the target root public folder or a folder in the public folder.
3. In the **Copy Progress** window, verify that your messages were successfully copied. You can also print or save the copy report by doing one of the following.
   - Click **Print** to print the copy report.
   - Click **Save** to save the copy report as a text file.
4. In the **Copy Progress** window, click **Close** to return to the main window.

Results of Restoring to Public Folders

When you restore folders from a pub.edb database to a public folder target, the following occurs:

- All public folder permissions are transferred to the target folders. However, folder permissions may not transfer if the version of the source Exchange Server is different than the version of the target Exchange Server.
- The Exchange user doing the restore will be added to all public folder permissions with owner rights.
- If you have IFS (also known as “M:drive”) enabled on your Exchange Server, permissions for child folders may be merged with permissions for parent folders.

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CHAPTER 6

USING THE COMMAND LINE

Overview

The command line feature allows you to easily batch repetitive processes such as multiple copy and export tasks without initiating the ShadowProtect Granular Recovery for Exchange (SPGRE) user interface. This feature is extremely beneficial in SPGRE production environment implementations.

Command Line Syntax

The syntax is as follows:

<< >> Required for all operations

< > Required for copy/export operations

[ ] Optional

Command Line Syntax

SPGRE [Program Options] <<Operation>> [Operation options] <<Source Store>> [Source options] <Source Folder Path> <Target Store> <Target Folder Path>

[Program Options]

<Operation>

-Copy

-Export

-List (report information about the database)

-Integ (Integrity Check)

-h (help)

[Operation options]+

-f <format>

format:

msg - messages will be exported as .msg (.msg is the default)

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:txt - message will be exported as .txt

:pst - messages will be exported to a PST

-p <format>

:97 - create a 97-2002 style PST for export/copy

:2003 - create a 2003 style PST for export/copy

-r

export/copy subfolders

-o <filename>

name of file to output progress information to default is CON

Note: *If the file exists, SPGRE will append to the output progress file. If the file does not exist, SPGRE will create it.*

-da <mm/dd/yyyy>

Process messages dated on or after this date

-db <mm/dd/yyyy >

Process message dated on or before this date

-v <verbose>

<Source Store>

Full path of EDB file, CAS file, or PST file

[Source options]

-l <Log file path>

-t <Temp file path>

< Source Folder Path >

full path, including mailbox to the source folder, or profile folder to be copied/exported or $ROOT for root datastore folder

<Target Store>

ServerName;mailbox or Full path of PST

Ex. Pcpdc;jJones

Pcpdc;hJohnson

C:\archive.pst

Note: *The Target Store is not needed for export.*

[Target options]

-pub public folders

<Target Folder Path>

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Full path, including mailbox to the target folder to be copied/exported to or $ROOT for root datastore folder

Note: *Only message containers (i.e., mailboxes, folders, entire EDB) can be selected for copy/export. All messages contained are copied/exported. Individual messages can not be selected from the command line.*

Examples of Using the Command Line

The following examples are for pre-populate EDB file, copy, export, integrity check, and list (i.e., report information about the database).

Example 1: Pre-populate the EDB file, log and temp path fields of the Open Source dialog.

SPGRE c:\data.edb -1 c:\edb -t c:\edb

<Operation>	**Explanation**
	Pre-populate the EDB file, log and temp path fields of the open source dialog
[Operation options]	**Explanation**
	Not applicable
<Source Store>	**Explanation**
c:\data.edb	Path to the EDB file
[Source options]	**Explanation**
-l c:\edb	Log file path
-t c:\edb	Temporary file path

Example 2: Copy pcuser1's Inbox and all subfolders from c:\pcdata.edb to the Inbox in c:\target.pst. c:\out1.txt will contain the copy report.

SPGRE -copy -r -o c:\out1.txt c:\pcdata.edb –l c:\edb -t c:\edb pcuser1\inbox c:\target.pst $ROOT

<Operation>	**Explanation**
-copy	Perform a copy operation
[Operation options]	**Explanation**
-r	Copy subfolders
-o c:\out1.txt	Output report file name
<Source Store>	**Explanation**

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<Operation>	**Explanation**
c:\p cdata.edb	Path to the database file name
[Source options]	**Explanation**
-t c:\edb	Temporary file path
<Source Folder Path>	**Explanation**
pcuser1\inbox	Source folder to copy
<Target Store>	**Explanation**
c:\target.pst	Target data store
<Target Folder Path>	**Explanation**
$ROOT	Copy to the root folder of the data store

Example 3: Copy pcuser1's Inbox and all subfolders from c:\pcdata.edb to user1's Inbox on Exchange Server pcpdc. c:\out1.txt will contain the copy report.

SPGRE -copy -r -o c:\out2.txt c:\pcdata.edb -t c:\ pcuser1\inbox pcpdc;user1 inbox

<Operation>	**Explanation**
-copy	Perform a copy operation
[Operation options]	**Explanation**
-r	Copy subfolders
-o c:\out2.txt	Output report file name
<Source Store>	**Explanation**
c:\p cdata.edb	Path to the database file name
[Source options]	**Explanation**
-t c:\	Temporary file path
<Source Folder Path>	**Explanation**
pcuser1\inbox	Source folder to copy
<Target Store>	**Explanation**
pcpdc;user1	Target data store (Exchange Server name and logon ID)
<Target Folder Path>	**Explanation**
inbox	Copy to the inbox

Example 4: Export pcuser1's mailbox and all subfolders from pcdata.edb as text to c:\export

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SPGRE -export -r -f:txt -o c:\out3.txt c:\pcdata.edb -t c:\ pcuser1 c:\export

<Operation>	**Explanation**
-export	Perform an export operation
[Operation options]	**Explanation**
-r	Export subfolders
-f:txt	Messages will be exported as .txt
-o c:\out3.txt	Export report file name
<Source Store>	**Explanation**
c:\p cdata.edb	Path to the database file name
[Source options]	**Explanation**
-t c:\	Temporary file path
<Source Folder Path>	**Explanation**
pcuser1	Source folder to copy
<Target Store>	**Explanation**
NA	Target data store
<Target Folder Path>	**Explanation**
c:\export	Root folder of the export

Example 5: Provides information on the databases including a list of mailboxes.

Tip: *When performing the -list operation, use the -o filename option in order to see the mailboxes. Otherwise, the operation will proceed so fast that you won't be able to see the mailboxes.*

SPGRE -list -o c:\mblist.txt c:\priv1.edb

<Operation>	**Explanation**
-list	Perform a list operation
[Operation options]	**Explanation**
-o c:\mblist.txt	Output report file name
<Source Store>	**Explanation**
c:\priv1.edb	Path to the database file name

Example 6: Perform an integrity check on and entire EDB.

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SPGRE -integ -r -o c:\output.txt c:\priv1.edb $ROOT

<Operation>	**Explanation**
-integ	Perform an integrity check on a database
[Operation options]	**Explanation**
-o c:\\output.txt	Output report file name
<Source Store>	**Explanation**
c:\priv1.edb	Path to the database file name
<Source Folder Path>	**Explanation**
$ROOT	Root of the EDB (entire EDB)

Example 7: Copy a folder from a pub EDB to public folders (only copy messages dated after 01/01/2000)

SPGRE -copy -r -o c:\out2.txt -da 01/01/2000 c:\pub1.edb newsgroups pc2000;administrator -pub $ROOT

<Operation>	**Explanation**
-copy	Perform a copy operation
[Operation options]	**Explanation**
-r	Copy subfolders
-o c:\out2.txt	Output report file name
-da 01/01/2000	Only copy messages that were created after this date
<Source Store>	**Explanation**
c:\pub1.edb	Path to the database file name
<Source Folder Path>	**Explanation**
newsgroups	Source folder to copy
<Target Store>	**Explanation**
pc2000;administrator	Target data store (Exchange Server name and logon ID)
<Target Options>	**Explanation**
-pub	Copy to public folders
<Target Folder Path>	**Explanation**
$ROOT	Public folders root

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Important:

- *All paths with spaces need to be in quotes.*
- *If a PST does not exist in the target, SPGRE will create a PST file compatible with Outlook 97, 98, 2000, and XP.*

Example 8: Perform an integrity check on an entire Content Analysis Store.

SPGRE -integ -r -o c:\out1.txt c:\source.cas $ROOT

<Operation>	**Explanation**
-integ	Perform an integrity check on a database
[Operation options]	**Explanation**
-r	check subfolders
-o c:\out1.txt	output report file name
<Source Store>	**Explanation**
c:\source.cas	Path to the Content Analysis Store file name
<Source Folder Path>	**Explanation**
$ROOT	Root of the CAS (entire CAS)

Example 9: Copy Profile1 from c:\source.cas to the root in c:\target.pst.

SPGRE -copy -r -o c:\out2.txt c:\source.cas Profile1 c:\target.pst $ROOT

<Operation>	**Explanation**
-copy	perform a copy operation
[Operation options]	**Explanation**
-r	copy subfolders
-o c:\out2.txt	output report file name
<Source Store>	**Explanation**
c:\source.cas	path to the Content Analysis Store file name
<Source Folder Path>	**Explanation**
Profile1	source folder to copy
<Target Store>	**Explanation**
c:\target.pst	target data store
<Target Folder Path>	**Explanation**
$ROOT	copy to the root folder of the data store

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Example 10: Export Profile2 from source.cas as text to c:\export

SPGRE -export -r -f:txt -o c:\out3.txt c:\source.cas Profile2 c:\export

<Operation>	**Explanation**
-export	perform a export operation
[Operation options]	**Explanation**
-r	export subfolders
-f:txt	messages will be exported as .txt
-o c:\out3.txt	export report file name
<Source Store>	**Explanation**
c:\source.cas	path to the Content Analysis Store file name
<Source Folder Path>	**Explanation**
Profile2	source folder to copy
<Target Store>	**Explanation**
NA	target data store
<Target Folder Path>	**Explanation**
c:\export	Root folder of the export

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CHAPTER 7

REPORTING

Overview

This section shows you how to create reports, view the statistics in the generated reports, and save the reports as either tab-delimited or comma-delimited text files. Any data store opened as a source can be the source of a report.

Creating Reports

You can generate reports on an EDB, PST, or CAS source data store in ShadowProtect Granular Recovery for Exchange (SPGRE). The reports contain statistics about the data store such as sizes and counts for attachments and messages, and may be generated per attachment type, domain, mailbox, database, and date. The Mailbox and Date reports are available for Priv EDB data sources only.

Note: *Only accessible mailboxes can generate a report.*

To create one or more reports

1. In the source pane, select an EDB, PST, or CAS data source.
2. On the **Tools** menu, click **Create Reports**. The **Create Reports** window appears.
   - If you selected a Priv EDB as the source for the report, the list pane displays all mailboxes in the EDB.
   - If you selected a PST or Pub EDB as the source, the list pane displays all folders immediately under the root of the PST or Pub EDB.

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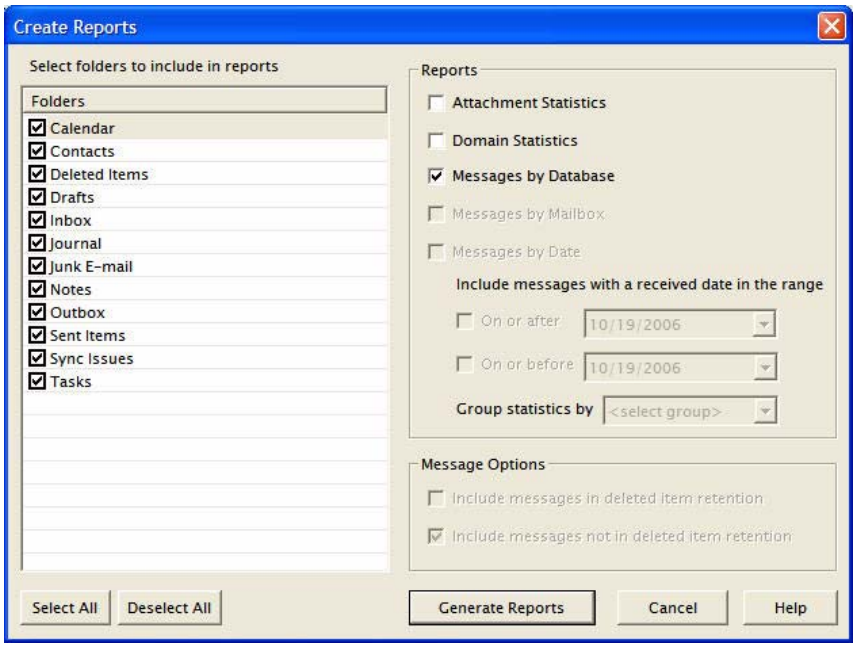

Figure 7-1. The Create Reports window

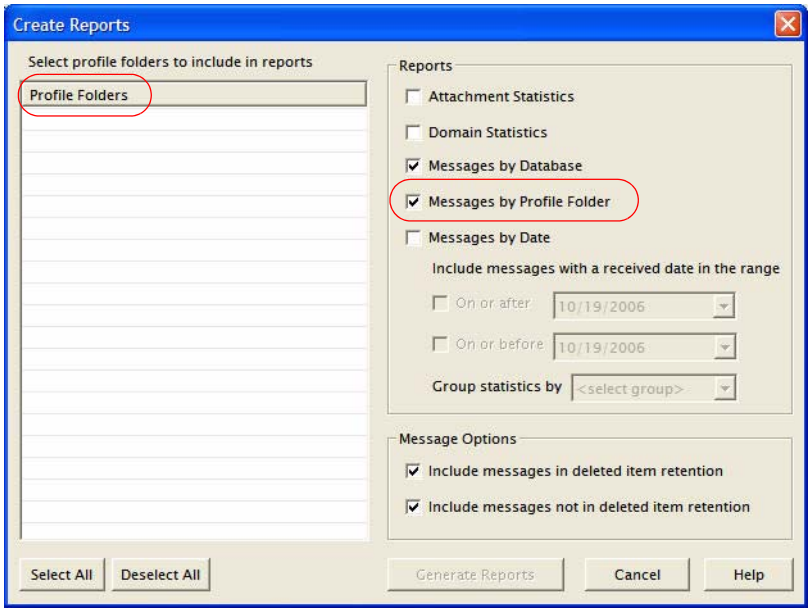

Figure 7-2. The Create Reports window for a CAS

3. Do one of the following:
   - **For Priv EDB:** Under **Mailboxes**, select the mailboxes to be included in the report(s). All mailboxes are selected by default.
   - **For Pub EDB or PST:** Under **Folders**, select the folders to be included in the report(s). All folders are selected by default.

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- **For CAS:** Under Profile Folders, select the folders to be included in the report(s). All folders are selected by default.

4. Under **Reports**, select one or more reports that you would like to create:
   - **Attachment Statistics**
   - **Domain Statistics**
   - **Messages by Database**
   - **Messages by Profile Folder:** This report is available for CAS data sources only.
   - **Messages by Mailbox:** This report is available for Priv EDB data sources only.
   - **Messages by Date:** If you select this report, then specify the appropriate options for received date range and date unit (for example, hour, day, week, month). This report is available for Priv EDB and CAS data sources only.
5. Under **Message Options**, select the appropriate deleted item retention option(s). Both options are selected by default. For PST sources, the first option is cleared. You cannot modify the default options for PST sources.
   - **Include messages in deleted item retention:** Select this option to include messages in deleted item retention.

   Note for Exchange Server 2010 sources: *When the* ***Show Recoverable Items (Exchange Server 2010)*** *preference is enabled (see Setting Preferences in "Security Tab" on page 28), the messages in the* ***Recoverable Items*** *folder are included in the reports for Exchange Server 2010 sources only if the Include messages in deleted item retention checkbox is selected. If the preference setting is cleared, then the Include messages in deleted item retention checkbox is unchecked and disabled for Exchange Server 2010 reports.*

   - **Include messages not in deleted item retention:** Select this option to include messages that are not in deleted item retention. In most cases, this option represents most of the messages in the source data store.
6. Click **Generate Reports**. The **Reports** window appears. For more information the contents of the reports, see "Viewing Reports" on page 110.

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Viewing Reports

The Reports window shows the progress of the report generation and also shows the reports themselves. This window consists of a tabbed view of the reports, with each tab containing a single report. For information on the statistics provided in each report, see the following sections.

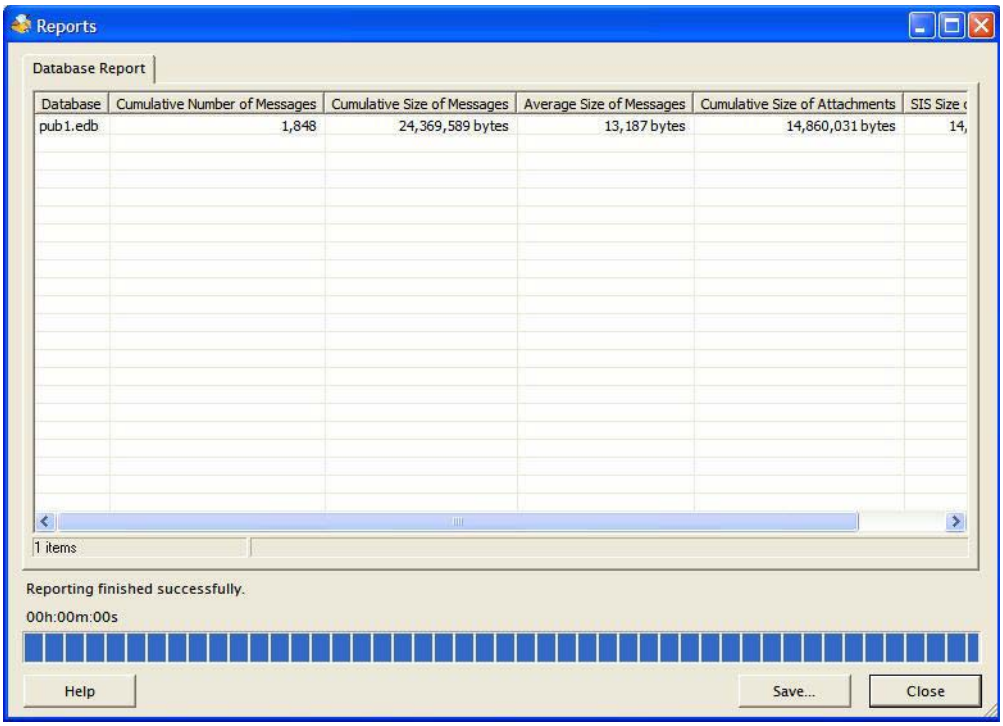

Figure 7-3. The Reports progress window

Single Instance Storage (SIS) vs. Cumulative Counts

The Attachment Statistics and Messages by Database reports use the terms “SIS” (Single Instance Storage) and “Cumulative” when referring to the number and size of attachments in the data store. The term “SIS” counts attachments only once and does not include their duplicates. The term “cumulative” refers to all of the attachments or messages, including their duplicates.

Example: An attachment of type .DOC of size 100 KB is being shared by three messages. As the table shows, the SIS size more closely estimates how much of the EDB size is attributed to the attachment.

The cumulative size more closely estimates how much of the EDB size is attributed to attachments if the data store did not have SIS.

Method of Counting Attachments/Messages	Total # of .DOC Attachments	Total Size of .DOC Files
SIS Count	1	100 KB
Cumulative Count	3	300 KB

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Attachment Statistics Report

The Attachment Statistics report provides statistics on all of the attachments contained in messages in the selected source. The attachments are categorized by extension, which appears in upper case letters (for example, .DOC, .XLS). Attachments without extensions are put into a separate row called “No Extension.”

Column Heading	Description
Attachment Extension	Attachment type by extension (for example, .DOC, .PPT, .PDF).
Cumulative Number of Attachments Found in Messages	Cumulative number of attachments of each type found in the processed messages.
Cumulative Size of Attachments	Cumulative size of attachments of each type found in messages.
Average Attachment Size	Cumulative size of attachments of each type divided by the cumulative number of attachments found in messages.
Percent of Total by Number	Number of attachments of each type divided by total attachments of all types.
Percent of Total by Size	Total size of attachments of each type divided by the total size of attachments of all types.
SIS Number of Attachments	SIS number of attachments of each type. NA for PST sources.
SIS Size of Attachments	SIS size of attachments of each type. NA for PST sources.
SIS Percent of Total by Size	SIS size of attachments of each type divided by SIS size of attachments of all types in attachment table. NA for PST sources.

Domain Statistics Report

The Domain Statistics report provides statistics on messages grouped by the domain from which the messages were sent.

The domain is determined using the PR_SENDER_ADDRTYPE in combination with the PR_SENDER_EMAIL_ADDRESS as follows:

- If PR_SENDER_ADDRTYPE is “EX” or “SYSTEM,” then it is an Exchange message and the domain is “internal.”
- If PR_SENDER_ADDRTYPE is “SMTP”, then the domain is whatever follows the @ in the PR_SENDER_EMAIL_ADDRESS property.
- If PR_SENDER_ADDRTYPE is something else, then the domain is “unknown.”

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Column Heading	Description
Domain	The name of the domain (for example, storagecraft.com) from which the message was sent. All messages whose domain cannot be determined are placed into an "unknown" domain. All Exchange messages are placed into an "internal" domain.
Number of Messages	Total count of messages that were received from each domain.
Total Size of Messages	Total size of all messages that were received from each domain.
Percent of Total by Number	Number of messages from each domain divided by the total number of messages from all domains.
Percent of Total by Size	Total size of messages from each domain divided by the total size of messages from all domains.

Messages by Database Report

The Messages by Database report provides statistics on the database that contains the processed messages. In the current version of SPGRE, reports are limited to a single EDB or PST, which means the database report has only one row of information. For example, the database report for Priv1.edb has one row of information listing all message statistics for Priv1.edb and its mailboxes.

Column Heading	Description
Database (EDB, PST, or CAS)	The database name (for example, Priv1.edb, Pub1.edb, Outlook XP.pst, User1.cas).
Cumulative Number of Messages	Cumulative number of messages.
Cumulative Size of Messages	Cumulative size of all messages processed.
Average Size of Messages	Cumulative size of messages divided by cumulative number of messages.
Cumulative Size of Attachments	Cumulative size of attachments in all messages processed.
SIS Size of Attachments	SIS total size of attachments. This column applies only to EDB sources. For PST and CAS data stores, this column is NA.

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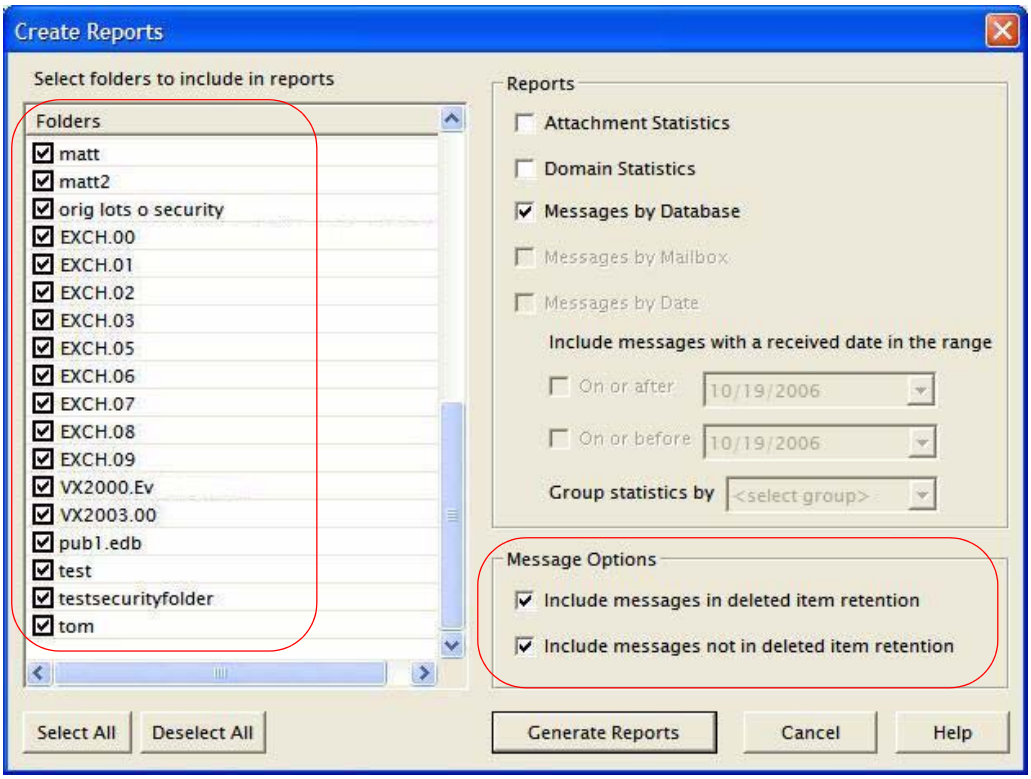

Figure 7-4. The Create Reports window for a Priv EDB source

Messages by Mailbox Report

The Messages by Mailbox report provides message statistics for all selected mailboxes in a Priv EDB data store.

Note: *This report is available only for a Priv EDB.*

Column Heading	Description
Mailbox	Name of the mailbox: Display name (alias)
Number of Messages	Total number of messages in the mailbox.
Total Size of Messages	Total size of all messages in the mailbox.
Average Size of Messages	Total size of messages divided by number of messages.
Total Attachment Size	Total size of attachments in all messages in this mailbox. Attachments in messages in this mailbox that are also in messages in another mailbox are counted in both mailboxes.
Shared Attachment Size	Size of attachments that are found more than once, either multiple times in this mailbox or in this mailbox and other mailboxes. Calculated as total size of attachments minus the non-shared attachment size.

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Column Heading	Description
Non-shared Attachment Size	Size of attachments that are *not* shared with other messages.
Internal Received Messages	Received messages of type “EX” or “SYSTEM.”
SMTP Received Messages	Received messages of type “SMTP.”
Other Received Messages	Received messages not of type “EX,” “SMTP,” or “SYSTEM.”

Note: *For a definition of “received message,” see the “Glossary” on page 141.*

Messages by Date Report

The Messages by Date report provides statistics for messages in a date range, such as 1/1/2004 to 1/1/2005, and a unit of hours, days, weeks, or months. The report is keyed off of the received date of the message.

Note: *This report is available only for a Priv EDB and CAS files.*

Column Heading	Description
Hour/Day/Week/Month	The date unit that was selected in the Create Reports window. Examples are: Hour: “12/25/2004 - 9 PM” Day: “12/25/2004” Week: “12/26/2004 - 1/1/2005” (Weeks start on Sunday and end on Saturday.) Month: “12/2004”
Internal Received Messages	Received messages of type “EX” or “SYSTEM.”
Total Size of Internal Received Messages	The sum of the internal received message sizes.
SMTP Received Messages	Received messages of type “SMTP.”
Total Size of SMTP Received Messages	The sum of the SMTP received message sizes.
Other Received Messages	Received messages *not* of type “EX,” “SMTP,” or “SYSTEM.”
Total Size of Other Received Messages	The sum of the other received message sizes.

Note: *For a definition of “received message,” see the “Glossary” on page 141.*

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Messages by Profile Folder

The Messages by Profile Folder report provides statistics for messages in a profile folder, the number of messages, total size of messages, average size of messages, total attachment size, shared attachment size, non-shared attachment size, internal received messages, SMTP received messages, and other received messages. The report is keyed off of the profile folder.

Note: *The Messages by Profile Folder report only includes information gathered from accessible mailboxes.*

Note: *This report is available only for a CAS.*

Column Heading	Description
Profile Folder	Title of the profile folder.
Number of Messages	Total number of messages in the profile folder.
Total Size of Messages	Total size of all messages in the profile folder.
Average Size of Messages	Total size of messages in the profile folder divided by number of messages.
Total Attachment Size	Total size of attachments in all messages in the profile folder.
Shared Attachment Size	Size of attachments that are found more than once, either multiple times in this profile folder or in this profile folder and other profile folders.
Non-shared Attachment Size	Size of attachments that are not shared with other messages.
Internal Received Messages	Received messages of type “EX” or “SYSTEM.”
SMTP Received Messages	Received message of type “SMTP.”
Other Received Messages	Received messages not of type “EX,” “SMTP,” or “SYSTEM.”

Note: *For a definition of “received message,” see the “Glossary” on page 141.*

Sorting Reports

Sorting of reports is available after the reporting process has finished. The order in which statistics first appear in the Reports window is based on the ascending order of statistics in the first column (for example, for the Attachment Statistics column, .DOC precedes .TXT). However, you can sort statistics based on any column heading.

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To sort the statistics in a report

1. Click a column heading to sort the statistics based on that heading. An arrow appears indicating the sort direction. An up arrow indicates the statistics appear in ascending (A-Z) order. A down arrow indicates that the statistics appear in descending (Z-A) order.
2. To reverse the order of the statistics based on that column heading, click the column heading again. The arrow reverses directions.

An Example of Sorting

The Attachment Statistics report is originally sorted based on the ascending order of attachment extensions (for example, .DOC precedes .TXT). If you click the Attachment Extension heading, the down arrow appears and statistics are sorted in descending order (for example, .TXT precedes .DOC).

If you click the "Number of Attachments Found in Messages" column heading, the up arrow appears and statistics are sorted based on ascending order. This means that the attachment extension occurring least frequently in the data source appears first in the report.

Saving Reports

You may save the currently active report as either a tab-separated or comma-separated text file. The report name defaults to the name shown on the report tab, without the spaces and with a .txt extension (for example, MailboxReport.txt). The file type defaults to a tab-separated text file.

To save a report

1. In the **Reports** window, make the desired report active by clicking its tab (for example, Attachment Report, Database Report).
2. Click **Save**.
3. In the **Save Report** window, specify the name, location, and file type for the report. You may save the report as either a tab-separated or comma-separated text file.
4. Click **Save** to return to the **Reports** window.
5. Repeat steps 1-4 for each report you want to save.

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CHAPTER 8

CONTENT ANALYSIS STORE

Overview

The content analysis store (CAS) enables you to automate and save search results by selecting sources. Sources include entire EDB files, individual mailboxes from an EDB, or folders from an EDB. Any number of sources is allowed, including multiple EDBs.

After selecting specific sources, you can create profile folders as subfolders to the content analysis store. Each profile folder has the same criteria as the search criteria, such as, “From,” “To,” “Subject,” etc. Only messages matching the criteria are contained in the profile. Multiple profile folders are possible. Every profile folder processes simultaneously. This allows you to make many separate searches (profiles) for the same set of sources.

After the processing is complete, you can open the content analysis store as a source. This allows you to use the CAS for searching, copying, exporting, and integrity checks. It allows you to copy the data out of the CAS into PSTs or to an Exchange Server. It allows you to repeatedly use a specific set of profile results without having to rerun the profile processing. The results of the profile can be saved between sessions using the CAS. You can also save the CAS on one computer and reopen it on a different computer to share the results of a profile.

Content analysis stores provide a method for an email administrator to perform content analysis offline from their production server. This feature:

- Minimizes the time it takes to detect/filter out emails that include specific content.
- Minimizes the time it takes to detect/filter out a specific type of email file that is being sent or received (for example, specific extension, subject, date).
- Analyzes the number of emails being sent/received that contain what could be legally damaging content (for example, admission of guilt).
- Analyzes the number of emails being sent/received that contain politically incorrect content (for example, tasteless jokes, pornography).
- Analyzes the number of emails with confidential content that go out unprotected - unencrypted.
- Minimizes the time it takes to determine if someone is using the system for unauthorized activity (for example, spamming, inappropriate downloads, starting a business).

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Creating a Content Analysis Store

A new content analysis store can be created from the File menu, from the toolbar, or from the Data Wizard. After the CAS file is created, a new content analysis store shows in the target pane.

To create a content analysis store using the toolbar

1. On the toolbar, click the **Create/Open Target Content Analysis Store** icon located on the toolbar. The **Opening a Content Analysis File** window appears.
2. Enter a **File name** and in the **Look in** box, select a destination.
3. Click **Open**. The name of the store defaults to the file name you entered in step 2. It can be renamed as any other target folder.

To open or create a target Content Analysis Store using the menu

1. To display the **Opening a Content Analysis File** window, on the **File** menu, point to **Open Target Content Analysis Store** and click **Open Existing** or **Create New**.
2. If creating a new target CAS, enter a **File name** and click **Open**.
3. If opening an existing target CAS, select the CAS from the list and click **Open**.

To open or create a target Content Analysis Store using the Data Wizard

1. On the **File** menu, click **Use Wizard**. The **Data Wizard** appears.
2. Click **Next**. The **Source Path Selection** page opens.

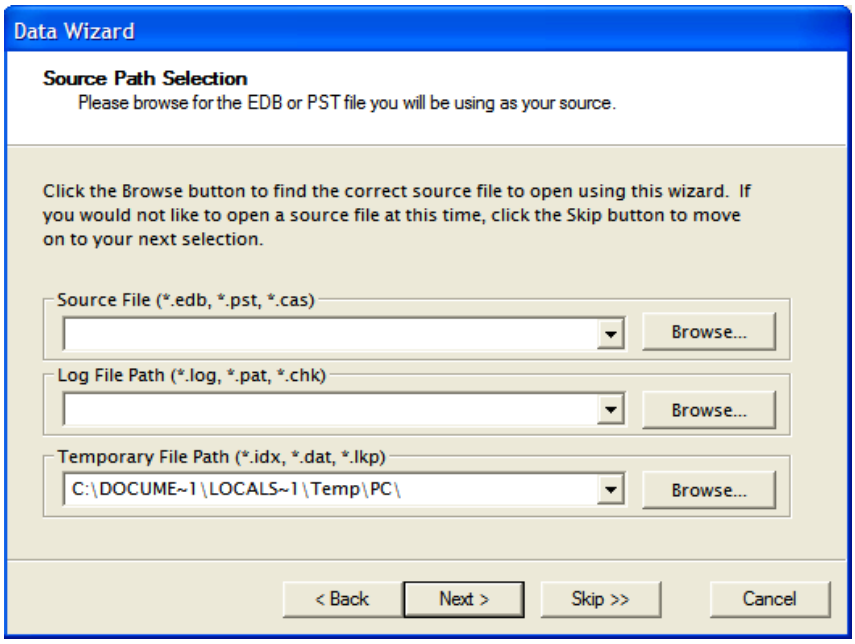
Data Wizard
Source Path Selection
Please browse for the EDB or PST file you will be using as your source.
Click the Browse button to find the correct source file to open using this wizard. If you would not like to open a source file at this time, click the Skip button to move on to your next selection.
Source File (*.edb, *.pst, *.cas)
Browse...
Log File Path (*.log, *.pat, *.chk)
Browse...
Temporary File Path (*.idx, *.dat, *.lkp)
C:\DOCUME~1\LOCALS~1\Temp\PC\
Browse...
< Back
Next >
Skip >>
Cancel

Figure 8-1. Selecting a CAS file in the Source Path Selection

3. In the **Source File** box, click **Browse** to find the source EDB you want to search. If you do not want to open a source EDB file at this time, click **Skip**.
4. Click **Next**. The **Target Type & Path Selection** page of the Data Wizard appears.

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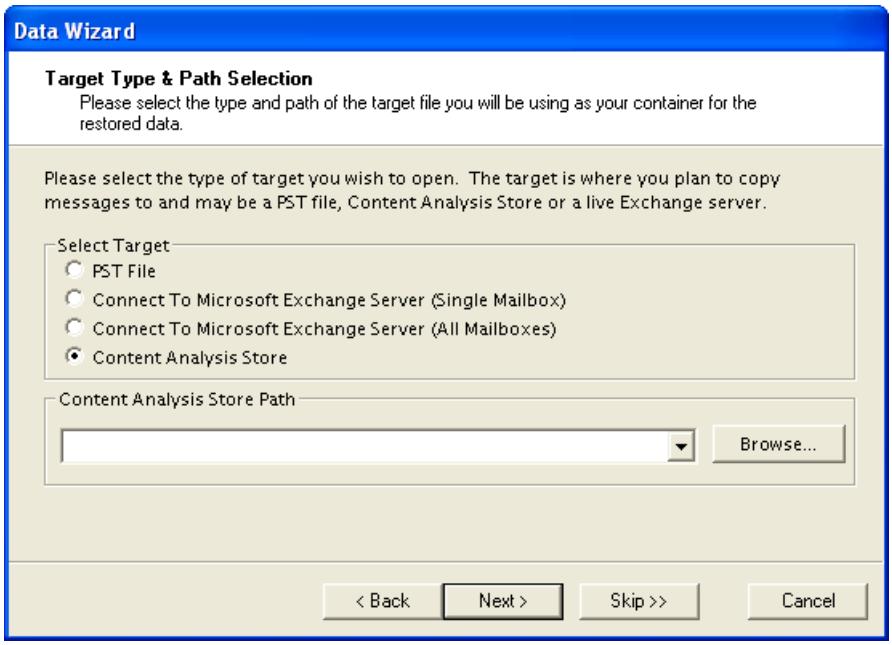
Data Wizard
Target Type & Path Selection
Please select the type and path of the target file you will be using as your container for the restored data.
Please select the type of target you wish to open. The target is where you plan to copy messages to and may be a PST file, Content Analysis Store or a live Exchange server.
Select Target
PST File
Connect To Microsoft Exchange Server (Single Mailbox)
Connect To Microsoft Exchange Server (All Mailboxes)
Content Analysis Store
Content Analysis Store Path
Browse...
< Back
Next >
Skip >>
Cancel

Figure 8-2. The Target Type & Path Selection window

5. Select **Content Analysis Store**.
6. Do one of the following:
   - If you know the target CAS file path, type it in the **Content Analysis Store Path** box.
   - Click **Browse** to open the **Create Content Analysis Store** window, and navigate to the desired location. Then create a new CAS file by typing a name in the **File name** box, or select an existing CAS file. Then click **Open**. The path of the target CAS file appears in the **Content Analysis Store Path** box.
7. Click **Next**. The **Completing the Data Wizard**page of the Data Wizard appears.
8. Click **Finish**.

Creating a Content Analysis Store with Exchange Server 2010 Data

Any source or target content analysis store (CAS) created with Exchange Server 2010 data is subject to different handling based on the Recoverable Items preference settings. See Setting Preferences in “Security Tab” on page 28.

When a CAS is created, whatever the Recoverable Items preference setting is at that time will be stored with that CAS. If you attempt to open a CAS as a source or target, the preference stored in the CAS is checked against the current preference setting. If they don’t match, the following message displays: *“The current ‘Show Recoverable Items (Exchange Server 2010)’ preference setting does not match the setting for the Content Analysis Store. The Content Analysis Store cannot be opened unless its setting is changed. To change the setting the Content Analysis Store, click ‘OK.’ The Content Analysis Store will be opened as a target and all profiles will be reprocessed. Click ‘Cancel’ to cancel opening the Content Analysis Store.”*

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Creating and Processing Content Analysis Store Profile Folders

A content analysis store profile folder is created as a subfolder of the content analysis store to filter EDB messages (only) based on the profile criteria.

When the profile folder is created, a folder appears under the content analysis store and ShadowProtect Granular Recovery for Exchange (SPGRE) searches all the sources in the content analysis store for messages that match the criteria for the profile folder.

During processing (searching), the profile folder is green and its status will indicate that processing is taking place. The status bar at the lower left also indicates the status. The message pane on the right populates with the results when the profile folder is selected or when the screen is refreshed.

Deduplication can be performed on a per profile basis and if selected does not return duplicates of a message during a search. For example, if the same message exists in two or more data stores, only the first message found is listed in the search results. Selecting this option may result in slower search performance.

Note: *Only accessible mailboxes in the EDB source can populate the CAS target profile with messages.*

To create and process a content analysis store profile folder

1. Select a target content analysis store root.
2. In the **Profile** menu on the menu bar, click **Create Profile**. The **Create Profile** window opens with “Profile1” as the default **Profile Name**. Once created, the content analysis store profile folder can be renamed just as any folder would be.
3. Enter the criteria for the content analysis. This window offers similar search options as the **Find** window. For more information, see “Finding Messages” on page 65.

   Note: *The **profile** criteria can be saved and imported.*

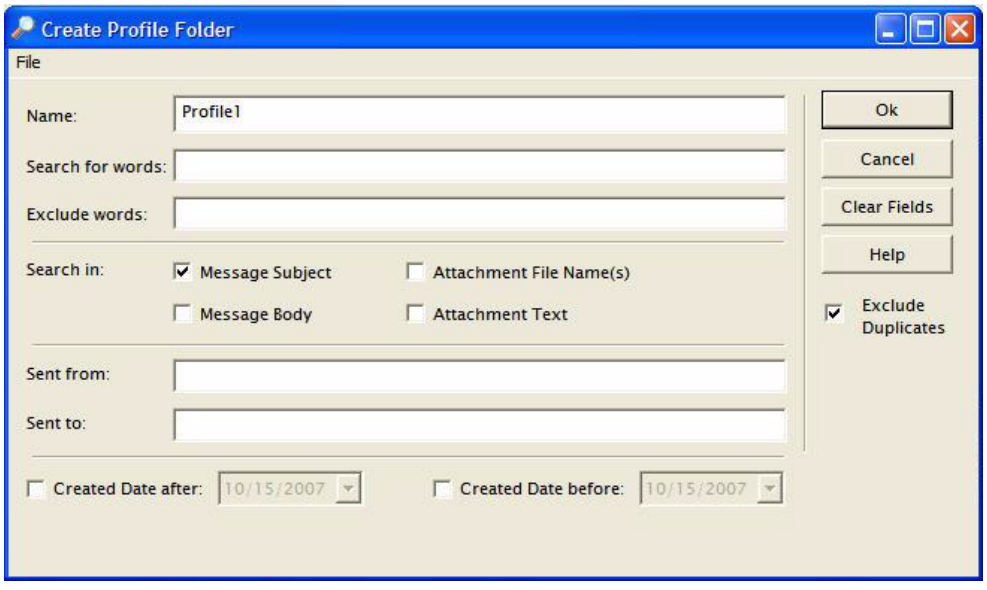

Figure 8-3. The Create Profile Folder window is used to enter profile criteria

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4. Click **OK**. SPGRE indicates that a profile is processing when the color of the profile folder is green and its status states “Processing.” When the profile is selected, the status shown in the status bar at the lower left of the main window indicates that the profile is processing. For more information, see “Profile Processing Statuses” on page 122.
5. When the processing for a profile is complete, the color of the profile icon changes from green to blue and its status states “Completed.” All messages from the content analysis store EDBs that match the criteria are contained in the profile folder.

   Note: *A content analysis store cannot be opened as a source until all profile processing has completed.*

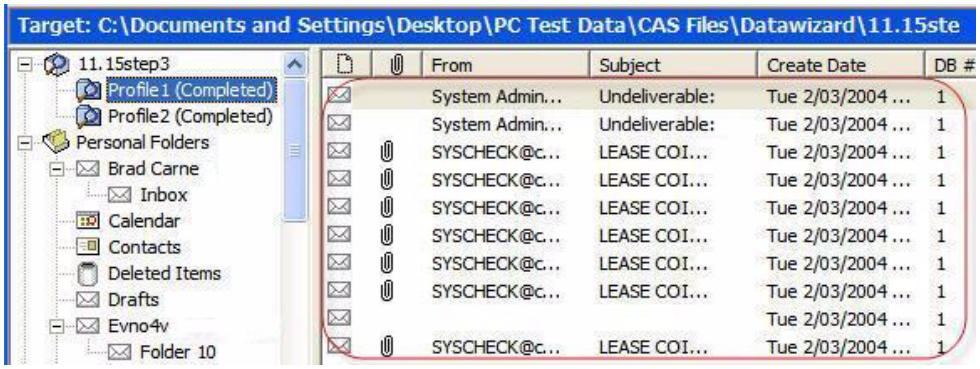

Figure 8-4. Messages displayed after profile folder created

Note: *If the same source is added to the content analysis store twice for processing, SPGRE ignores the second copy. The source is not listed twice nor is an error message displayed.*

DB # Column

The content analysis store profile folder message views include a column to display a database number to enable you to trace back to the actual database in the content analysis store. This number does not correlate to the profile folder number or source #, i.e., “Profile1” or “Source 1” does not necessarily correlate with DB #1. The correlation is between the profile folder message and the source database.

Example:

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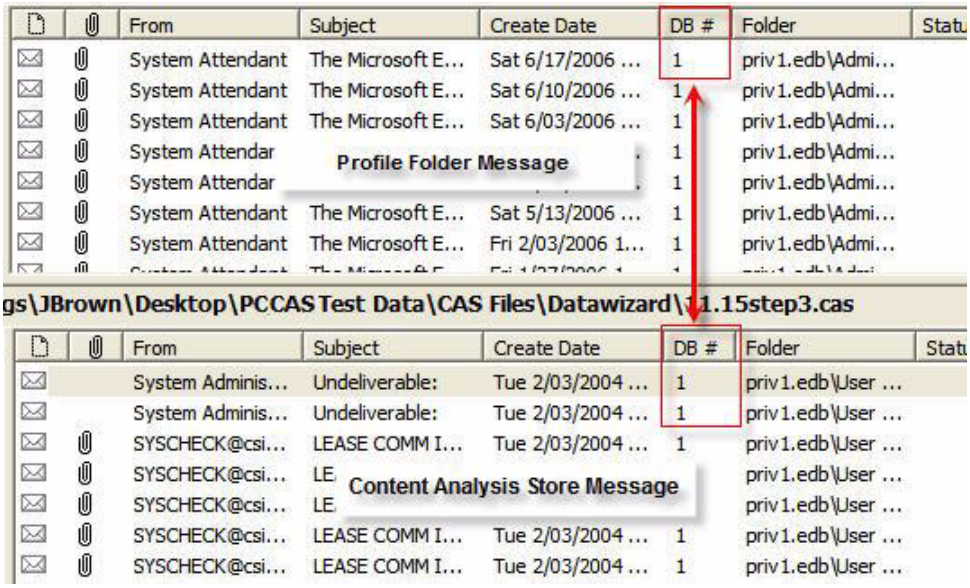

Figure 8-5. The Database numbers are tied to the actual database.

Note: *Database (DB) numbers are tied to the actual database, not the folder so each folder from the same EDB will have the same DB number. DB numbers increment from 1 for each different database added to the content analysis store, not for each folder.*

PROFILE PROCESSING STATUSES

When the profile is processing, there are four possible statuses that are displayed: **Processing**, **Suspended**, **Completed**, and **Completed with errors**.

Figure 8-6. Profile Processing Status folders are indicated by different colors

Processing

After entering the profile criteria, the profile is created and is represented by a folder under the content analysis store. During processing (searching), the profile folder is green and its status states "Processing." Selecting the profile folder or pressing F5 populates the message pane with messages when the processing is complete.

Processing occurs when a new profile is created, when removing a source, when adding a source, when editing a profile, when copying a source profile folder to a target content analysis store, or when resuming a suspended profile.

Note: *If unrecoverable errors are encountered during processing then the profile is not fully processed and is blue in color with a red* ***!*** *indicating the error.*

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Suspended

Processing can be suspended (see “Suspending and Resuming Content Analysis Store Profile Folders” on page 124) on any profile folder during processing. Suspended profile folders are red in color. The status also indicates that the profile is suspended.

Completed

Once the processing is complete, the profile folder turns blue and its status states “Completed.”

Completed with errors

If SPGRE detects corruption or some other issues while processing, the profile folder status states “Completed with errors.” To obtain details on the error, view the Properties on the profile folder by right-clicking on the profile folder and selecting Properties.

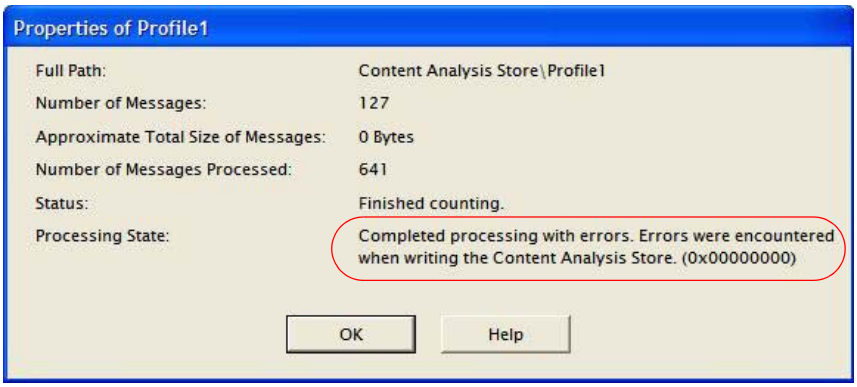

Figure 8-7. An error message displays when processing cannot be completed

SAVING AND IMPORTING PROFILE CRITERIA

Profile criteria can be saved and later imported into a new profile in the Create Profile window to save time.

To save a profile criteria

1. On the **File** menu, click **Save Criteria**.
2. In the **Save As** window, enter a **File name** and click **Save**. Be sure to note where the criteria file is being saved in the **Look in:** box.

   Note: *The profile folder name is not saved.*

To import saved profile criteria

1. On the **File** menu, click **Use Previous Criteria**.
2. In the **Open** window, select the previously saved profile criteria .txt file.
3. Click **Open**. All previously saved profile criteria, except for the Profile Name, reads from the file and is placed into the **Create Profile** fields.
4. Enter a new **Profile Name**.

   Note: *Search criteria from previous and current versions of SPGRE can be imported into SPGRE for find and profile criteria.*

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Suspending and Resuming Content Analysis Store Profile Folders

You can pause the processing of one or more profile criteria folders and then resume processing at a later time. Suspended profile folders are red in color and then turn to green when processing is resumed. The folder then turns to blue when processing is complete. For more information, see "Profile Processing Statuses" on page 122.

Important: *Processing of all profiles is suspended automatically if you exit SPGRE or if you close the content analysis store before processing is complete.*

To suspend the processing on profiles

1. Do one of the following:
   - Select the profile folder, click the **Profile** menu and click **Suspend Processing**.
   - Right-click the profile folder and click **Suspend Processing**.

To suspend processing on all profiles

1. Do one of the following:
   - Select the content analysis store root, click the **Profile** menu and click **Suspend Processing**.
   - Right-click the content analysis store root and click **Suspend Processing**.

   Note: *Suspended profiles are red in color. The status also indicates that the profile is suspended.*

To resume processing on profiles

1. Do one of the following:
   - Select a profile folder, click the **Profile** menu and click **Resume Processing**.
   - Right-click the profile folder and click **Resume Processing**.

To resume processing of all profiles

1. Do one of the following:
   - Select the content analysis store root, click the **Profile** menu and click **Resume Processing**.
   - Right-click the profile folder and click **Resume Processing**.

Adding Sources to Content Analysis Stores

Only EDB store objects, EDB mailboxes, or EDB folders can be drag and dropped or copied and pasted from the source into the new content analysis store root to prepare for analysis.

Note: *Messages or folders cannot be copied directly to a profile folder (results folder).*

To add a folder, a mailbox, or an EDB file with copy-paste

1. In the source pane, select a folder, a mailbox, or an EDB file.
2. Do one of the following:
   - On the **Edit** menu, click **Copy**.
   - Right-click the selected item(s), and on the shortcut menu, click **Copy**.
   - Click the **Copy Mail Item** icon on the toolbar.

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- Press **Ctrl+C** (Copy).

3. In the target pane, click the content analysis store root and do one of the following:
   - On the **Edit** menu, click **Paste**.
   - Right-click the selected item, and on the shortcut menu, click **Paste**.
   - Click the **Paste** icon on the toolbar.
   - Press **Ctrl+V** (Paste).
4. In the **Copy Progress** window, verify that your messages were successfully copied, and click **Close**.

To add data even faster, use drag-and-drop

- To move entire EDB store objects, EDB mailboxes, or EDB folders, drag to the target content analysis store root. Dragging and dropping achieves the same results as copying and pasting.

To use drag-and-drop when right-clicking a source item

1. In the source pane, select one or more messages.
2. Right-click the selected message containers and drag them to a content analysis store in the target pane.
3. When you let go of the mouse, a shortcut menu appears. On the shortcut menu, click **Paste**.

   Important: *If a new source (Inbox, Deleted items, Outbox, etc.) is dropped into the content analysis store or the user removes a source store from the content analysis store, all profiles automatically process the new source.*

Editing and Deleting Profiles

Deleting a profile stops any processing on that profile and removes that profile and all data associated with it from the content analysis store. Deleting a profile does not modify the EDB sources.

To edit a profile

1. To edit a profile, right-click the profile folder and click **Edit Profile** or click on the **Profile** menu and click **Edit Profile**.
2. The **Edit Profile Folder** window appears. Edit any or all of the criteria. When new criteria is entered, all messages in the profile are deleted, the icon changes to its processing color (green), the profile status will update, and the process begins.

To delete a profile

1. Do one of the following:
   - Right-click the profile folder and click **Delete**.
   - Click profile folder, and on the **Edit** menu, click **Delete**.
   - Select the profile folder and press the **Delete** key on the keyboard.

Closing a Content Analysis Store

Closing a content analysis store root closes the root as well as all of the profile folders created under that root.

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To close a content analysis store (CAS)

1. Do one of the following:
   - Right-click the CAS and click **Close Store**.
   - Click the CAS and on the **File** menu, click **Close Store**.

Opening a Content Analysis Store as Source

When all profile processing has completed, you can open the content analysis store as a source, for which the following source operations can be performed: Copy/Paste, Paste Special, Export, Find, Integrity Check, Properties, and Create Reports. Use Copy/Paste to copy source profile search criteria to a target content analysis store.

If a content analysis store is opened as a source and it has not completed processing all profiles, a window indicates that the content analysis store has not completed its processing. There is then an option to open the CAS as a target. If that option is selected, SPGRE opens it as a target and resumes processing on all remaining profiles.

To open a content analysis store as source

1. One the **File** menu, click **Open Source**. The **Select Source Files** window opens.

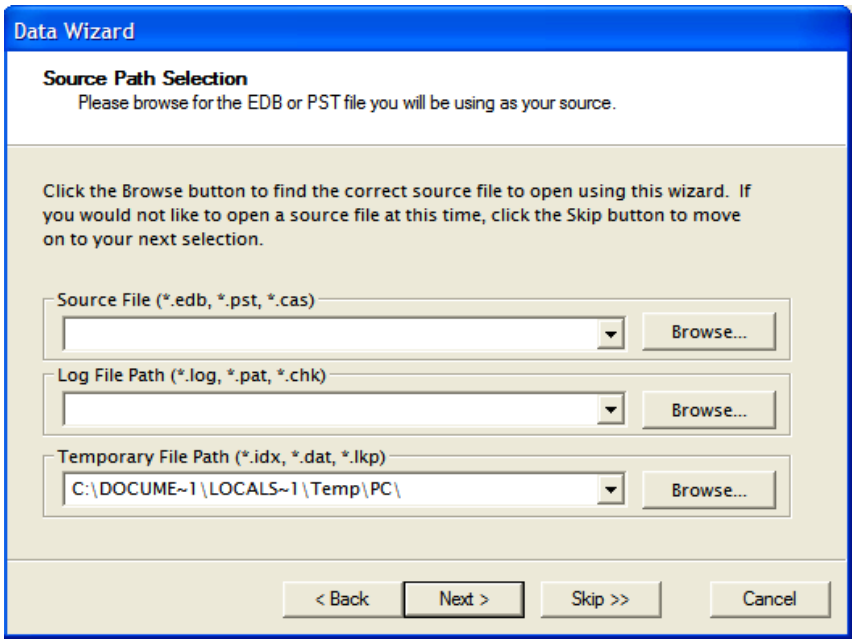
Data Wizard
Source Path Selection
Please browse for the EDB or PST file you will be using as your source.
Click the Browse button to find the correct source file to open using this wizard. If you would not like to open a source file at this time, click the Skip button to move on to your next selection.
Source File (*.edb, *.pst, *.cas)
Browse...
Log File Path (*.log, *.pat, *.chk)
Browse...
Temporary File Path (*.idx, *.dat, *.lkp)
C:\DOCUME~1\LOCALS~1\Temp\PC\
Browse...
< Back
Next >
Skip >>
Cancel

Figure 8-8. The Source Path Selection window is used to open a CAS as source

2. Click **Browse** to the right of **Source File (*.edb, *.pst, *.cas)**. The **Open** window appears.
3. Select a .cas file and click **Open**.
4. In the **Select Source Files** window, click **OK**. A source content analysis store appears in the left pane of source.

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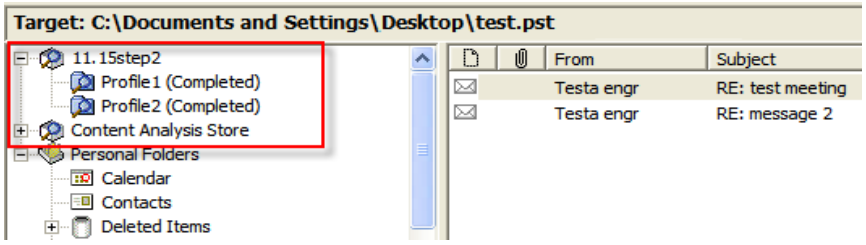

Figure 8-9. A source content analysis store root and profile folders

Viewing Properties of a Content Analysis Store

To view the properties of a content analysis store

1. To display the **CAS File Properties** window, right-click the CAS in either the source or target pane and click **Properties**.

Figure 8-10. The Properties of the selected CAS file

To view the properties of a content analysis store profile folder

1. Right-click the profile folder and click **Properties**.

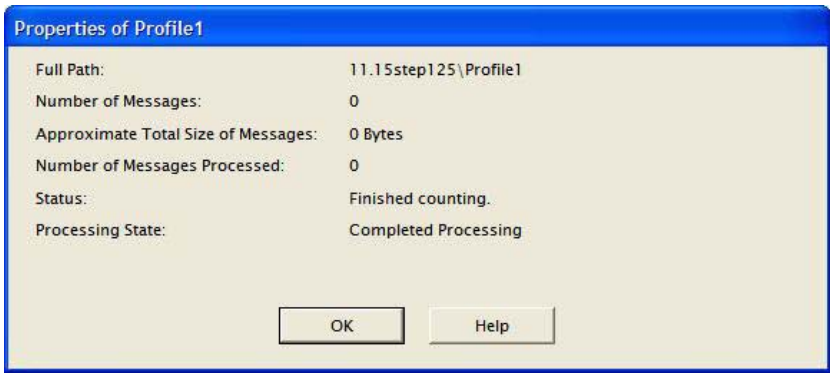

Figure 8-11. The Properties of the CAS profile folder

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Creating Reports in Content Analysis Store

You can create reports of the source content analysis store by right-clicking the source content analysis store root. The reports are:

- Attachment statistics
- Domain statistics
- Messages by Database
- Messages by Profile Folder
- Messages by Date

See “Creating Reports” on page 107 for instructions on creating reports.

Viewing Profiles in Content Analysis Store

The Viewing Profiles option allows you to view what profile criteria has been used for a specific content analysis. All fields are read only.

To view a profile

1. Do one of the following to display the **Profile Folder Properties** page:
   - Right-click the profile folder in either the source pane or target pane and point to **View Profile Folder**.
   - Click the profile in either the source pane or target pane, click the **Profile** menu and click **View Profile Folder**.

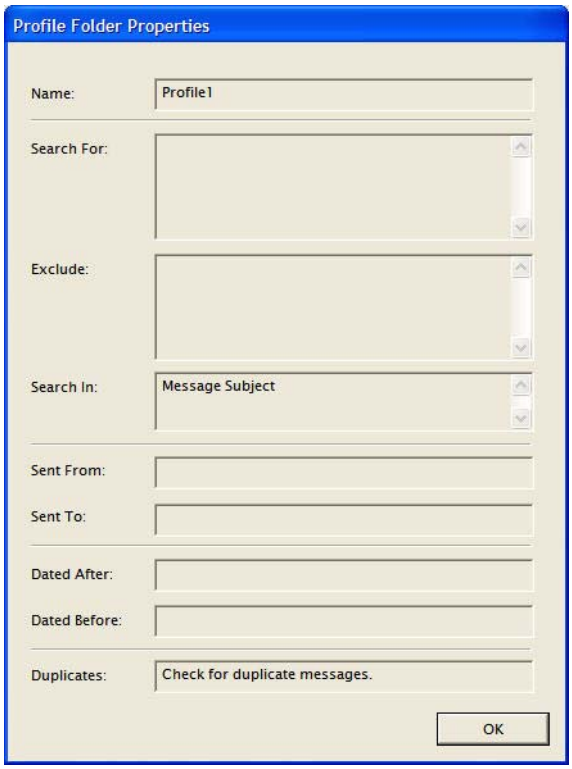

Figure 8-12. Profile Folder Properties

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2. Click **OK** to exit.

Missing Database Files

If an EDB or log file that belongs to a content analysis store is moved and then the content analysis store is opened, there is a prompt to find or remove the missing database files. If the EDB is located but the STM is missing, SPGRE displays an error indicating that the STM needs to be located in the same directory as the EDB.

Missing EDB

When there is a wrong EDB, you are prompted to locate the file.

Figure 8-13. This message appears if the EDB file is missing

To locate the missing EDB

1. On the **Missing Database File** error message, click **Browse**. The **Open** window appears.
2. Navigate to the EDB files and double-click the appropriate file.
3. Click **OK**. The source pane now populate with files.
4. If you are unable to locate the EDB file, click **Remove** on the **Missing Database File** error message. A message asking you to confirm your decision to remove the file is displayed.
5. Click **OK**.

Important: *When an EDB is removed, the complete source EDB is removed from the CAS as well as any source folders or mailboxes that also reference that EDB.*

Missing Log Files

When there are missing log files, you are prompted to locate the log directory. The Browse button opens a Browse for Folder dialog and defaults to the last known location of the logs.

To locate the missing log files

1. On the **Missing Database File** error message, click **Browse**. The **Open** window appears.
2. Navigate to the directory containing the logs and click **OK**. The source pane now populates with files.

Important: *When logs are removed, the complete source EDB is removed from the CAS as well as any source folders or mailboxes that also reference that EDB and logs.*

Missing STM Files

When there are missing .stm files, you are prompted to remove the files.

To remove missing .stm files

1. On the **Missing Database File** error message, click **Remove**.
2. A message asking you to confirm your decision to remove the file is displayed. Click **OK**.

Important: *When the .stm is removed, the complete source EDB is removed from the CAS as well as any source folders or mailboxes that also reference that EDB and .stm.*

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MISSING TEMP FILES DIRECTORY LOCATION

When there are missing temp file directory locations, you are prompted to locate the temp file directory location. The Browse button opens a Browse for Folder window and defaults to the current temporary path set by SPGRE.

To locate missing temp file directory location

1. On the **Missing Database File** error message, click **Browse**. The **Open** window appears.
2. Navigate to the directory containing the temp files.
3. Click **OK**. The source pane now populates with files.

Note: *If just the temp files are missing but the directory exists, it recreates the temp files.*

Wrong Database Files

When SPGRE finishes opening the EDB, it checks the database for the correct file in the content analysis store. If it does not locate the correct file, it determines that there is a different EDB at the original location than when the CAS was originally created. An error is displayed and prompts you to remove the file from the CAS.

To remove wrong files

1. On the **Wrong Database File** error message, click **Remove**.
2. A message appears asking if you are sure you want to remove the source and all related messages from the content analysis store. Click **OK**.

Upgrading from a Previous Version

If you attempt to open a content analysis store created with a prior version of SPGRE, you will be prompted to upgrade the content analysis store. After the upgrade process, the content analysis store will no longer be compatible with a prior version of SPGRE. For this reason, it is recommended that you make a copy of the content analysis store before upgrading it.

To upgrade the content analysis store

1. Open the content analysis store you want to upgrade, either as a source or a target.
2. A message appears asking if you are sure you want to upgrade the content analysis store. Click **OK**.
3. The content analysis store opens as a target and all sources in the content analysis store are opened. If any database files are missing, you will be prompted to browse for the missing files. See the “Missing Database Files” on page 129 for more information.
4. After the content analysis store has been opened as a target, all profiles are reprocessed.
5. Once the content analysis store is opened as a target, it has been upgraded and can no longer be opened with a previous version of SPGRE.

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CHAPTER 9

MESSAGE VIEWS

Overview

You can view all instances of a given message or attachment in the EDB source(s) within the same database as well as messages related by conversation in the Message Views option. This option is particularly useful in assisting with administrative tasks such as database cleanup activities, determining the history or dissemination of a message, or grouping messages by conversation thereby allowing you to view them together in context without missing a reply or forward.

Message views are available for messages in the source pane, find results pane, and also from another message view. Message views are available only on single messages. If multiple messages are selected in the message pane, the message view menu items and toolbar buttons are unavailable.

You can view a message in various ways, depending on the message view option selected. Upon option selection, you are presented the following:

- **Message Table View**—all the messages that are referenced by the same message table row as the selected message.

  Note: *The Message Table View does not support Exchange 2007 and Exchange 2010 EDB sources as Microsoft stopped supporting single instance storage with Exchange 2007.*

- **Attachment Table View**—all the messages that have an attachment that are referenced by the same attachment table row as the selected attachment.

  Note: *The Attachment Table View does not support Exchange 2007 and Exchange 2010 EDB sources as Microsoft stopped supporting single instance storage with Exchange 2007.*

- **Conversation View**—messages that are related by conversation, with the sorting order of the email thread based on who replied to whom within the thread. Messages are indented to show the thread timeline of when replies occurred.

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Message Views Menus and Toolbars

The message views are accessible via the Tools menu, toolbar buttons, and a sub-menu on the shortcut menu in the message panes.

Message Views Menus

The Tools menu contains a sub-menu with menu items for each message view.

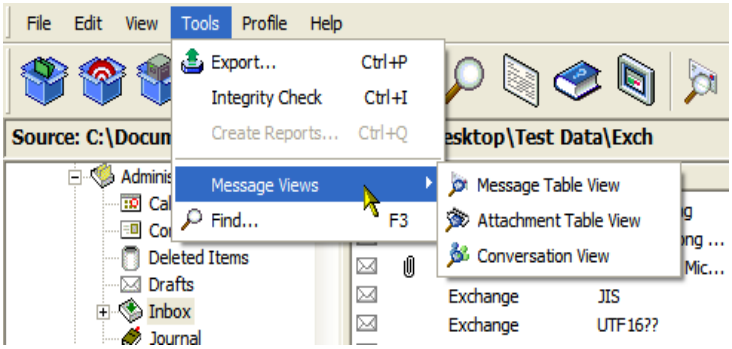

Figure 9-1. The Tools menu leads to the Message Views options

Message Views Toolbar Icons

A toolbar button exists for each message view: Message Table View, Attachment Table View, and Conversation View.

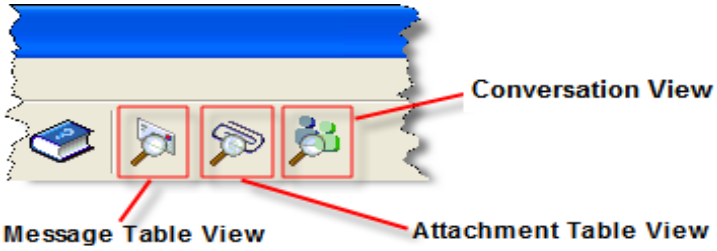

Figure 9-2. The Toolbar provides another option for accessing the Message Views

Message View Shortcut Menu

The source pane shortcut menu has a Message Views sub-menu with menu items for each message view. As with the main menu, the new Message Views menu items provides status bar text when they are highlighted.

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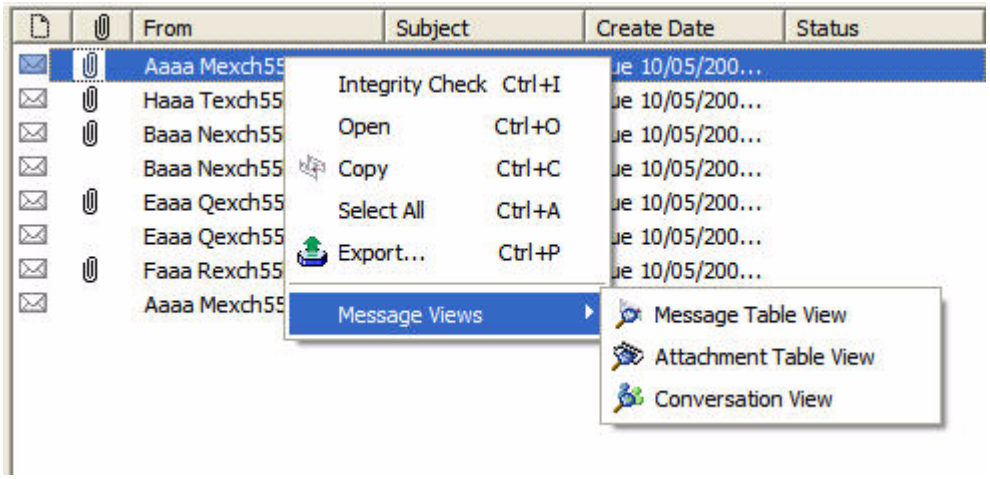

Figure 9-3. The Message View options can be reached by right-clicking an EDB message in the upper message pane.

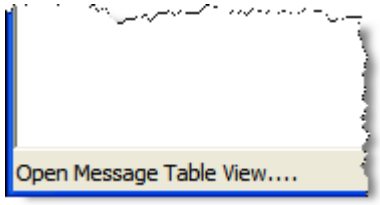

Figure 9-4. The Status Bar

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Message View Pane

The Message View Pane is the area that hosts the various message views. The pane provides you the ability to view the related messages and perform various actions (for example, viewing messages in alternate views, exporting messages to your directory, checking the integrity).

Other Options Available in the Message View

Other actions can be performed within a Message View, such as Exporting messages, Integrity Check, copying messages, and viewing a message in another Message View.

Figure 9-5. Other options available in the Tools menu are Copy, Export, and Integrity Check

These options are available in any Message View:

- **Copying Messages**—Messages within a Message View can be copied and pasted into folders in the target pane via the Edit menu or shortcut menu. For more information about copying messages, see “Restoring Exchange Data” on page 87.
- **Exporting Messages**—Messages within a Message View can be exported as any message can via the Tools menu or shortcut menu. For more information, see “Exporting Messages” on page 79.
- **Integrity Check**—Messages within a Message View can have an integrity check performed on them via the Tools menu or shortcut menu. For more information, see “Looking at the Interface” on page 11.
- **Message Views**—Messages within a Message View can be viewed in any of the three Message View options, Message Table View, Attachment Table View, or Conversation View. The message view options are only available if a single message is selected.

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Message View Options

You have the option of viewing all instances of a given message or attachment in the EDB source(s) in three different ways—Message Table, Attachment Table View, and Conversation View.

Note: *The Message Table and Attachment Table Views do not support Exchange 2007 and Exchange 2010 EDB sources as Microsoft stopped supporting single instance storage with Exchange 2007.*

Message Table View

Choosing the Message Table View option displays all the messages from the same EDB that reference the same message table row (Single Instance Storage).

Note: *The Message Table View does not support Exchange 2007 and Exchange 2010 EDB sources as Microsoft stopped supporting single instance storage with Exchange 2007.*

Example:

A message is sent to User1, User2, and User3. The message is stored in the message table once. If a user opens up the database and right-clicks the message in User1's Inbox and chooses Message Table View, a table opens with three messages in it: One in User1's Inbox (or deleted items), one in User2's Inbox, and one in User3's Inbox as long as they are all in the same Exchange database (EDB). If User 1, 2, or 3 are in a different EDB, those messages will not appear in this view.

Sample

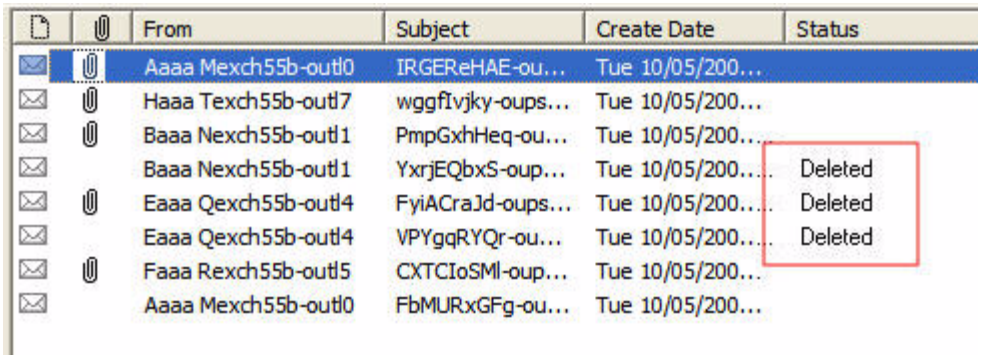
From
Subject
Create Date
Status
Aaaa Mexch55b-outl0 IRGEReHAE-ou... Tue 10/05/200...
Haaa Texch55b-outl7 wggfIvjky-oups... Tue 10/05/200...
Baaa Nexch55b-outl1 PmpGxhHeq-ou... Tue 10/05/200...
Baaa Nexch55b-outl1 YxrjEQbxS-oup... Tue 10/05/200... Deleted
Eaaa Qexch55b-outl4 FyiACraJd-oups... Tue 10/05/200... Deleted
Eaaa Qexch55b-outl4 VPYgqRYQr-ou... Tue 10/05/200... Deleted
Faaa Rexch55b-outl5 CXTCIoSMl-oup... Tue 10/05/200...
Aaaa Mexch55b-outl0 FbMURxGFg-ou... Tue 10/05/200...

Figure 9-6. The Message Table View displays messages that have been deleted.

The message pane displays the related messages in a report format showing the Message Type, Attachment, From, To, Subject, Folder, Date, and Status (indicating if message has been deleted).

Note:

- *Only messages within the same EDB can be viewed in the Message Table View.*

To open and view messages in the Message Table View

1. In the message pane, select an EDB message.
2. Do one of the following to display the **Message Table View**:
   - Click the **Message Table View** icon on the toolbar.
   - Right-click a message and point to **Message Views**, then click **Message Table View**.

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- Click the **Tools** menu, point to **Message Views**, then click **Message Table View**.

Note: *The first time opening a view on this EDB, a message appears stating that a Message View file needs to generated.*

Attachment Table View

Choosing the Attachment Table View option displays all of the messages in the same EDB that have an attachment referencing the same attachment table row as the selected attachment (Single Instance Storage). If the message contains multiple attachments, a sub-menu listing each individual attachment allows the selection of an individual attachment.

Note: *The Attachment Table View does not support Exchange 2007 and Exchange 2010 EDB sources as Microsoft stopped supporting single instance storage with Exchange 2007.*

Example:

A message with an attachment is sent from User1 to User2 and User3. User3 forwards the email to User4. The attachment is stored in the attachment table only once (single instance storage). A user opens up the Exchange database (EDB) containing these messages and creates an Attachment Table View on the message in User1's "Sent Items" folder. The Attachment Table View contains five messages: one in User1's Sent Items, one in User2's Inbox, one is User3's Inbox, one in User3's Sent Items and one in User4's Inbox as long as they are all in the same EDB.

As in the Message Table View, the Attachment Table View shows the related messages in a report format with Message Type, Attachment, From, To, Subject, Folder, Date, and Status (including indicating if message has been deleted).

Note:

- *Only messages with attachments can be viewed in the Attachment Table View.*
- *Only attachments within the same EDB can be viewed in the Attachment Table View.*
- *Attachments within inaccessible mailboxes cannot be viewed in the Attachment Table View.*

To open the Attachment Table View

1. In the message pane, select a message.
2. Do one of the following to display the **Attachment Table View**:
   - Click the **Attachment Table View** icon on the toolbar.
   - Right-click a message and point to **Message Views**, then click **Attachment Table View**.
   - Click the **Tools** menu, point to **Message Views**, then click **Attachment Table View**.

   Note: *The first time opening a view in this EDB, a message appears stating that a Message View file needs to generated.*

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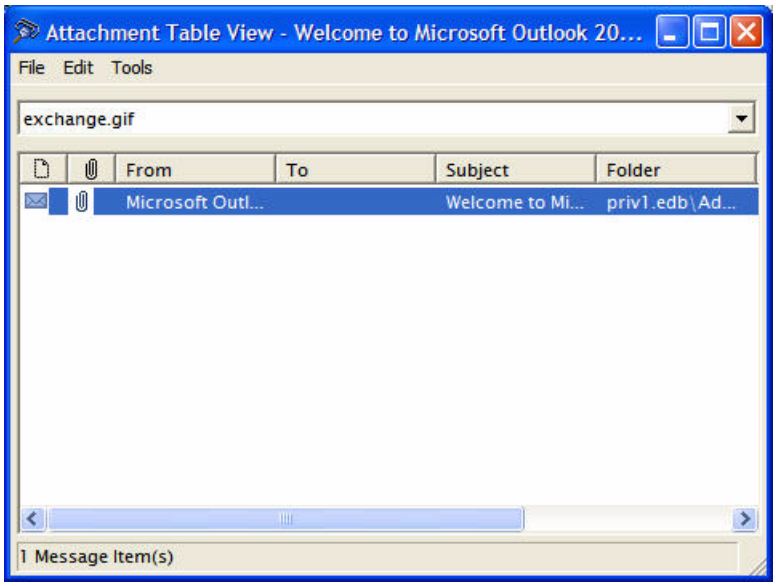

Figure 9-7. The Attachment Table View displays messages with attachments

3. To view a message within the **Attachment Table View**, right-click a message, point to **Message Views** and select one of the following options:
   - Message Table View
   - Attachment Table View
   - Conversation View
4. Any message in the Attachment Table View can be opened by double-clicking the message in the table.

Conversation View

Choosing the Conversation View option displays the messages that are related by conversation showing the Message Type, Attachment, From, To, Subject, Folder, Date, and Status (including indicating if message has been deleted). Messages are indented to show the chain of replies and forwards.

Example:

If a user composes and sends Email 1 to another user, and that user sends Email 2, a reply to Email 1, then Email 1 has no indention and Email 2 is indented one level. If the first user then replies to Email 2 with Email 3, then Email 3 is indented two levels.

Note:

- *Only conversation threads within the same EDB can be viewed in the Conversation View.*
- *Messages within inaccessible mailboxes cannot be viewed in the Conversation View.*

To open a Conversation View

1. In the message pane, select a message.
2. Do one of the following to display the **Conversation View**:
   - Click the **Conversation View** icon on the toolbar.

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- Right-click a message and point to **Message Views**, then click **Conversation View**.
- Click the **Tools** menu, point to **Message Views**, then click **Conversation View**.

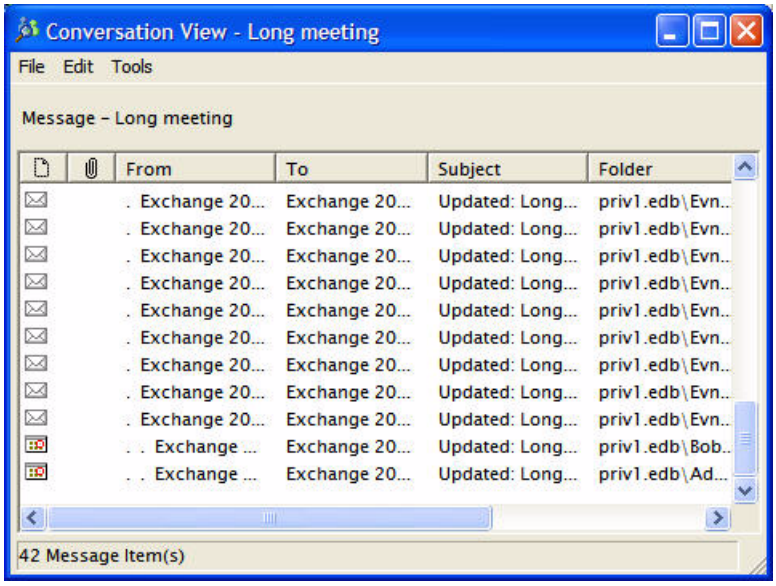

Figure 9-8. The Conversation View displays the conversation threads which are indicated by indentions.

Note:

- *The first time opening a view on this EDB, a message appears stating that a Message View file needs to generated.*
- *If the first message is missing, the next message in the thread is still indented indicating that it is not the original message.*

3. To view a message within the **Conversation View**, right-click a message, point to **Message Views** and select one of the following options:
   - Message Table View
   - Attachment Table View
   - Conversation View
4. Any message in the Conversation View can be opened by double-clicking the message in the table.

Opening a View for the First Time

To create a Message View for the first time

1. The first time you create any Message Table View, Attachment Table View, or Conversation View, ShadowProtect Granular Recovery for Exchange (SPGRE) creates a Message View file. If no file exists, you are prompted to create the file.

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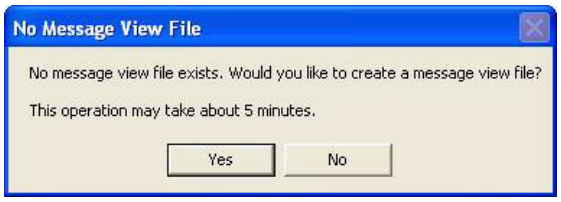
No Message View File
No message view file exists. Would you like to create a message view file?
This operation may take about 5 minutes.
Yes
No

Figure 9-9. This message informs the user that an initial message view file does not exist

2. Click **Yes** to create the file. A progress window is displayed to indicate the stage, progress text, estimated time, elapsed time, and a grow bar.

   For Exchange 2007 and earlier, there are 5 stages: Initializing file, Processing attachments, Processing messages, Processing rows, and Saving file.

   For Exchange 2010, there are 3 stages: Creating the file, processing the conversation messages, and saving the file.

   After the message view file has been created, if creating a Message Table View, the **Creating Message View File** progress window is replaced by another progress dialog that tracks the progress of view preparation. A **Preparing Message Table View** progress window appears.

   If you click **Cancel** during this process, the Message Table View is not shown.
3. To view a message within the **Message Table View**, **Attachment Table View**, or **Conversation View**, right-click a message, point to **Message Views** and select one of the following options:
   - Message Table View
   - Attachment Table View
   - Conversation View
4. To open a message in the Message Table View, Attachment Table View, or Conversation View, double-click on the message in the table.

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Find in Source Window in Message Views

You can open a message view from the Find in Source window by using the Message Views sub-menu on the Find Window's top-level Tools menu. The messages in the Find in Source window's results pane also have the Message Views shortcut menu by right-clicking on a message and pointing to Message Views.

Note: *The Attachment Table View does not support Exchange 2007 and Exchange 2010 EDB sources as Microsoft stopped supporting single instance storage with Exchange 2007.*

To open messages in Find in Source window result pane in different views

1. Click the **Find** icon on the toolbar. The **Find in Source** window is displayed.
2. Enter search criteria in the appropriate fields.
3. Click **Find Now**. The **Results** pane appears with the search results.

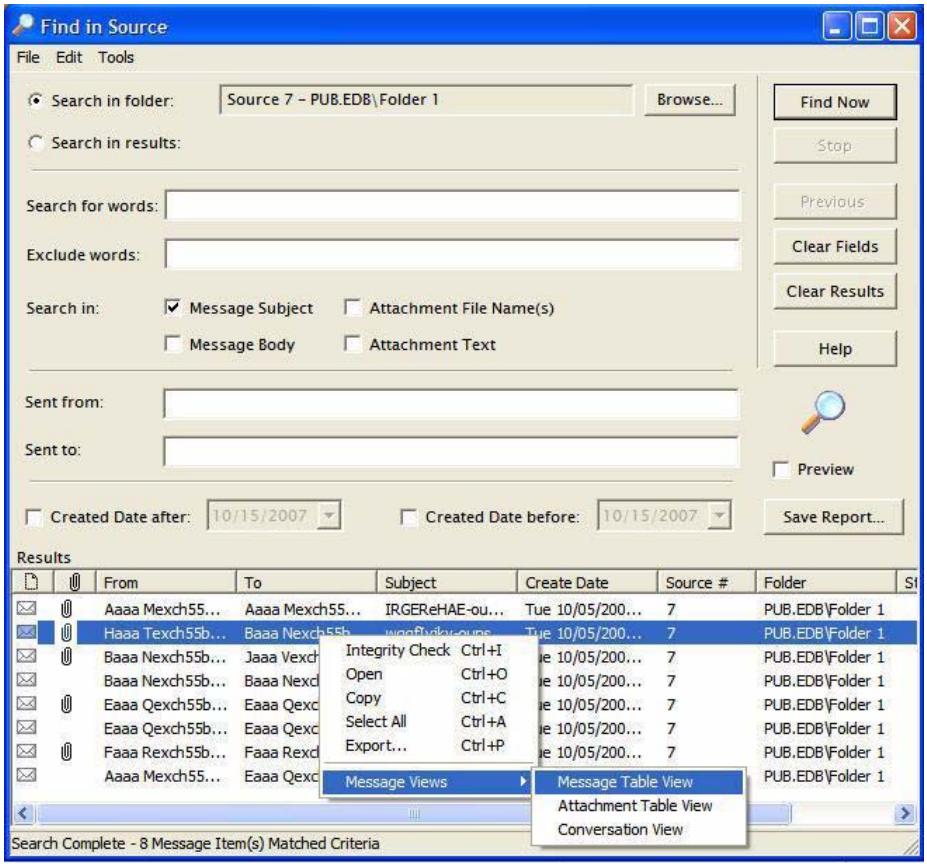

Figure 9-10. The Find results can be displayed in each of the Message Views

4. Do one of the following:
   - Click the **Tools** menu, point to **Message Views**, then click the desired view in the sub-menu.
   - Right-click the message, point to **Message Views**, then click the desired view in the sub-menu.

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Term	Description
Attachment Table View	A table that displays all the messages that have an attachment referenced by the same attachment table row as the selected message.
CAS	See Content Analysis Store
CHK	Checkpoint files (.chk files) are used for recovering (playing) data from transaction logs into EDB files. The checkpoint is the place marker in the EDB.CHK file that indicates which transactions have been committed. Whenever data is written to an EDB file from the transaction log, the EDB.CHK file is updated with information specifying that the transaction was successfully committed to the respective EDB file. Separate Exx.chk files are maintained for each storage group using ESE (Extensible Store Engine).
Content Analysis Store (CAS)	A data store type where each message in the root level container identifies a source container. A source container can either be an EDB, an EDB mailbox, or an EDB folder. The CAS is used to analyze messages based on profile criteria entered before processing.
Conversation View	A table that displays all messages in the database that are related by conversation. The conversation thread is indented to indicate replies.
Data Store	A unified collection of folders and messages contained in a single storage medium. A PST file is a data store. An Exchange Information Store is also a data store. In a basic case, Exchange has two live data stores, one for the private mailboxes and one for the public folders.
Data Wizard	The first time you start ShadowProtect Granular Recovery for Exchange (SPGRE), the Data Wizard starts. The Data Wizard guides you through the loading of Exchange Database (EDB), PST files, or content analysis store (CAS) files into SPGRE, and shows you how to specify the target PST file or Exchange Server.
Deduplication	Deduplication is performed on a per profile basis and if selected does not return duplicates of a message during a search. For example, if the same message exists in two or more data stores, only the first message found is listed in the search results.
EDB	See Exchange Database.
EIS	See Exchange Information Store.

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Term	Description
Exchange Database	This file, which usually has an EDB extension, contains the mailbox, folders, and messages you see when connecting to an Exchange Server. The Exchange Server reads and writes to this file in response to incoming email and events from the clients. On Microsoft® Exchange Server 2000, this is one of the two files that make up the Exchange Information Store, the other being the STM file.
Exchange Information Store	This is the set of files that make up the data store for private mailboxes and public folders on a Microsoft® Exchange Server. For Microsoft® Exchange Server 5.5, this is the single Exchange Database file usually named priv1.edb and pub1.edb. On Microsoft® Exchange Server 2000, 2003, 2007, and 2010, the private mailbox data store will consist of the files priv1.edb and priv1.stm, and the public folder data store will consist of pub1.edb and pub2.stm.
Log Files	Transaction log files (.log files) are history files recording server activity. These files are useful in restoring and backing up Exchange data. Transaction logs for Exchange Server 5.5, 2000, and 2003 are 5 MB in size. Transaction logs for Exchange Server 2007 and Exchange Server 2010 are 1 MB in size.
Messages	Messages are found in the folders of an Exchange Information Store. Messages can mean “email,” but Outlook *Contacts* are also messages, as are *Appointments*, *Journal Entries*, *Sticky Notes*, and *Tasks*.
Message Table View	A table that displays all messages that are referenced by the same message table row as the selected message. For example: A message that is sent to three different users is displayed three times, one in each users Inbox.
PAT	Patch files (.pat files) are used to record information on page splits in Exchange Server 5.5 through Exchange Server 2000 (SP1). In Exchange Server 2000 (SP2) and later, the functionality provided by .pat files is incorporated into Exchange log files.
Profile Folder	A subfolder of the content analysis store containing the results of profile criteria entered for processing.
PST	Personal Storage file. This file, used by Outlook, contains folders and messages that have been retrieved from a user’s Exchange mailbox and copied locally.

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Term	Description
Received Messages	Messages that have been sent through an Exchange Server to another mailbox. Messages in the "Sent Items" folder are copies of messages sent through an Exchange Server and are not considered to be "received messages." Because messages in the "Drafts" folder, "Notes" folder, and other similar items are not sent through an Exchange Server, they too are not considered to be "received." ***Note:*** *Because recovery software such as SPGRE restores messages from a source to an Exchange mailbox without sending them, the messages that SPGRE restores are not considered to be "received messages."*
Shortcut Menu	This menu is accessed by right-clicking on an item.
Source Data Store	This is the data store from which folders and messages are copied. The source is read-only, so items cannot be copied into, deleted from, or changed in the source.
STM	For Exchange Server 2000 and 2003, this is one of the two files that make up the Exchange Information Store, the other being the EDB file. The STM file stores certain data for emails that come into the Exchange Server through the POP or SMTP port. This email data may eventually get moved into the EDB file over time.
Target Data Store	This is the data store to which folders and messages are copied. The target is read-write allowing items to be added, deleted, and changed. The target data store can be an Exchange Server or PST file.

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GLOSSARY

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